ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

FIRST SESSION

ON

H.R. 4144

AN ACT MAKING APPROPRIATIONS FOR ENERGY AND WATER DEVELOPMENT FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1982, AND FOR OTHER PURPOSES

PART 4—(Pages 2615–3244)

NONDEPARTMENTAL WITNESSES

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ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

MONDAY, MARCH 30, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room 1318, Everett McKinley Dirksen Senate Office Building, Hon. Robert W. Kasten, Jr., presiding.

Present: Senators Hatfield and Kasten.

NONDEPARTMENTAL WITNESSES

SUBCOMMITTEE PROCEDURE

Senator KASTEN. The subcommittee will come to order.

In the absence of the chairman of the subcommittee, Senator Hatfield, I have been asked as a member of the subcommittee to preside over today's session. Senator Hatfield expresses his regrets that he can't be here this morning, however, all of us have a number of conflicting activities and we are all working together.

We have a long list of witnesses that wish to be heard and, therefore, in accordance with our notification to each witness, it will take some self-restraint on all of our parts to be brief in our presentations so that all of you who have requested an opportunity to be here this morning may, in fact, be heard.

So, in keeping with the subcommittee wishes, I ask that the detailed statements that each of you have worked out very carefully be submitted for the record where they will be carefully reviewed. As I think all of you are aware, that is the record the subcommittee will study in determining its judgments and recommendation for the upcoming year.

Also, in this way, through the prepared statements, there will be a carefully detailed record so that any member who is not present today will be able to arrive at an independent judgment.

So, if each witness will summarize or highlight the important points in his or her oral testimony it will be most helpful and we will be able to move along on the schedule that all of you have been given.

IOWA WATER RESOURCE PROJECTS

STATEMENT OF HON. ROGER W. JEPSEN, U.S. SENATOR FROM IOWA

Senator KASTEN. We will now proceed with our first witness.

It is my great pleasure and the pleasure of the subcommittee to have with us this morning Senator Jepsen from Iowa, who is here to introduce his distinguished guests.

Senator Jepsen.

Senator JEPSEN. Thank you, Mr. Chairman. I am honored to appear before this subcommittee with my colleagues from Iowa to testify in support of various flood control projects in the State of Iowa. I would like to welcome Mayor Charles Wright of Davenport, as well as Mr. Dale Mercer, administrator of the community development board in Waterloo, to today's hearing.

They will be offering important testimony on the Davenport and Waterloo flood control projects.

Two years ago in the spring, Mr. Chairman, many areas of our country witnessed severe flooding. Thanks to the quick and efficient emergency preparations undertaken by the Corps of Engineers, potential harm was averted to a great degree. I would like to thank the Corps for their quick action in these situations.

This morning I would like to say a few words about two of the Iowa projects included in the fiscal year 1982 budget. In addition, I do want to submit for the record my written comments on the remainder of the construction projects.

DAVENPORT LOCAL PROTECTION PROJECT

Mr. Chairman, Davenport is subject to severe flooding from the Mississippi River and Black Hawk Creek. In 1970, a program for flood protection was authorized and, subsequently, preconstruction planning was completed.

Unfortunately, there have been problems within the Federal Government which have delayed the start of the project. Mayor Wright will address these problems and their impact on Davenport.

WATERLOO LOCAL PROTECTION PROJECT

This is the fourth consecutive year that the city of Waterloo has sent representatives to appear before this subcommittee on behalf of the Waterloo flood control project. This project has enjoyed continued widespread community support over the past 4 years but needs continued funding.

Waterloo has experienced several disastrous floods which have caused millions of dollars in damage. It is imperative to continue construction work on schedule in order to eliminate or minimize the possibility of more damaging floods. Mr. Mercer will give you a more detailed report on the progress of this project.

I urge the subcommittee to join me and Senator Grassley in support of the President's request for $5,620,000 to continue construction.

Mr. Chairman, I would beg your leave. I do have to move on, but these two gentlemen will tell the story and tell it well. Thank you, Mr. Chairman.

Senator KASTEN. Thank you very much. Senator, your comments and prepared testimony will become a part of the permanent record of this subcommittee and the subcommittee greatly appreciates your help and your interest in the work and I am sure that we are all going to be looking for your leadership and taking your example on the projects that particularly affect the great State of Iowa.

[The statement follows:]

STATEMENT OF SENATOR ROGER JEPSEN

Mr. Chairman, I am honored to appear before the Senate Appropriations Energy and Water Subcommittee with my colleague from Iowa, Senator Grassley, to testify in support of various flood control projects in the State of Iowa. I would like to welcome Mayor Charles Wright of Davenport, as well as Mr. Dale Mercer, administrator of the community development board in Waterloo to today's hearing.

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Thank you, Mr. Chairman.

KANSAS WATER RESOURCE DEVELOPMENT PROJECTS

STATEMENT OF HON. ROBERT DOLE, U.S. SENATOR FROM KANSAS

Senator KASTEN. Ladies and gentlemen, I am going to break into the program a tiny bit here. The subcommittee is honored to have Senator Bob Dole from the State of Kansas join us for a moment this morning.

Before Mr. Mercer and Mayor Wright speak, I would like to ask Senator Dole if he would like to make any comments to the subcommittee this morning.

Senator DOLE. Thank you very much, Mr. Chairman.

I have an amendment on the floor between 10 and 11 o'clock that I need to be there for, so I appreciate the indulgence of the committee. I see a number of friends from Kansas and other States. I have been coming to these hearings on an annual basis for a long time, not as long as Lew Paramore, but almost as long.

Lew is a fixture in our State and has done an outstanding job as long as I have been in the Congress and even before.

We have a number of Kansans here and certainly others who are here not in their interest, but in the interest of their communities and flood control. I don't have any real quarrel with the budget. We would like to emphasize the growing importance in my State of the projects for probably contradictory reasons. First, flood control, and, second, water supply. In the long run, they are both critical.

The last time I checked, floods are not a problem in our State. It is water. But in any event, we have Mr. Schwartz who has been coming here for a long time from Paola; Buford Watson from Lawrence; Lew Paramore, Jim Hart, Roy Phillips, Gene DuVall, and Mrs. Phillips. Most of those Kansans are making statements.

PREPARED STATEMENT

I also have a statement I would like to be made a part of the record.

Again, I appreciate your indulgence, and ask that my statement not interrupt the Iowa presentation.

Senator KASTEN. The committee will make every effort to put Senator Dole's statement at the appropriate part in the record but we will just be pleased and happy that you have been able to join us for a minute this morning and all of us in the Senate know of your long-standing interest in a number of these projects.

[The statement follows:]

STATEMENT OF SENATOR BOB DOLE

Mr. Chairman, I am pleased to introduce the representatives from Kansas and Missouri of the Mo-Ark Association. I particularly welcome Lew Paramore, Gene Duvall, Buford Watson, Mike Schwartz, Jim Hart, Ray Kirk, and Jim McPherson. These men and others have worked for years to develop this river basin and it is a pleasure to have them here today.

Very briefly, I would like to emphasize the growing importance in my State of these projects for two seemingly contradictory reasons—flood control and water supply. As I have told this committee before, recent severe floods in Kansas illustrate that we still have work to do in preventing devastating flooding. Even more important to us this year is the necessity of taking every possible step to increase our water supply. The drought that has spread across Kansas and the Nation is threatening the water supplies of dozens of communities. Many of these towns cannot rely on groundwater, and that will become more true as the water levels in Kansas decrease. Kansas communities suffering from present water shortages are increasingly looking to federally assisted water storage projects to meet their needs. I would like to emphasize that this problem will only grow worse in coming years, and we would be wise to meet it now.

Those of us who represent Kansas are pleased with the administration's recommendations for our State. The uncompleted projects needing additional funding will receive it, and for this we are thankful. I think these recommendations show a sensitivity to the future needs in our area. I would like to urge the committee to be aware of the particularly severe effects of the drought in southeast Kansas. When the appropriate time comes, I hope the Appropriations Committee will closely consider the Fort Scott Lake project, which would do much to alleviate the growing shortage of water in that part of our State.

I thank the committee for allowing me to testify this morning and appreciate your consideration of the requests of those who will testify for the Mo-Ark Association.

WATERLOO LOCAL PROTECTION PROJECT

STATEMENT OF DALE MERCER, ADMINISTRATOR OF COMMUNITY DEVELOPMENT, CITY OF WATERLOO, IOWA

Senator KASTEN. Mr. Mercer, Mayor Wright, which one of you would like to go first?

Mr. MERCER. Thank you, Mr. Chairman. It is a privilege to be here this morning and thank you for your indulgence. We have submitted prepared statements, though I am not going to take a lot of time only to say that we appreciate all of the help that you have given us in the past and our project is some 75 percent either under construction or completed.

We do support the President's asking in the budget and we support his request for the 1982 fiscal year.

The only thing that I would like to add to the printed statements is that I did give to staff members this morning an excerpt from the Des Moines paper, to just point out that it does on its cover have, and on the inside, an article detailing the coordination in urban development block grant with our flood control project. It shows how city and various agencies can coordinate their efforts in flood control and preserving the downtown area. With that, Mr. Chairman, I would like to express again our thanks for the past help and look forward to continuing funding consistent with the President's budget.

Senator KASTEN. We are very happy to have you as our guest this morning and we appreciate your interest and your testimony.

[The statement follows:]

STATEMENT OF DALE C. MERCER, ADMINISTRATOR OF COMMUNITY DEVELOPMENT, WATERLOO, IOWA

Mr. Chairman, my name is Dale C. Mercer and I reside at 1130 Ora Drive, Waterloo, Iowa. I am the Administrator of Community Development for the City of Waterloo. I am appearing today on behalf of Mayor Leo P. Rooff in support of the Waterloo Local Flood Control Project. I am a member of and on the Board of Directors of the Water Resources Congress. The Water Resources Congress, as in the past, continues to whole-heartedly endorse the Waterloo Flood Control Project.

We have been informed that the U. S. Army Corps of Engineers has a capability to gainfully use the appropriation request for Fiscal Year 1982 of $5,620,000 provided in the President's Budget for continuation of construction of the Waterloo Project. The City has authorized the necessary local funds and has the administrative skills to collaborate with the Corps of Engineers in our flood control effort.

Mr. Chairman, with this in mind, my statement will serve to complete the record of the progress made to date in planning and executing a huge redevelopment and flood control program of significant benefit to the City of Waterloo. The Flood Control-Community Development Project being accomplished in Waterloo has been cited nationally for economic and social betterment in a metropolitan area while reducing local, State and Federal costs.

To date, the Waterloo Flood Control and Redevelopment Agency has made the following progress:

(i) Purchased 758 parcels of land for a dollar amount of $10,774,000. Relocated 513 families and 116 businesses from the flood plain.

(ii) Arranged for and provided direct assistance to families and homeowners desiring to rehabilitate their property. Rehabilitation expenditures to date in our flood control related Community Development project are $3,100,000 for residential rehabilitation and $15,125,000 for nonresidential rehabilitation.

(iii) An Urban Development Action Grant was recently approved for redevelopment of a part of the Central Business District in the amount of $3,318,500. This has generated over $16,500,000 in private redevelopment. A portion of the private redevelopment was contingent on the Corps of Engineers construction of the flood wall and the City constructing a new bridge. The coordination of and joint funding by the Federal Government, City and private sector is presently underway.

(iv) Construction of an ambitious $3.5 million HUD financed Water and Sewer Program coordinated with flood control and community development activities to improve life for all of our citizens has been completed.

(v) Cost of private industrial development, resulting from the combined Flood Control-Community Development projects, either completed or for which commitments have been made, is valued at more than $140 million.

(vi) The City of Waterloo has been certified as eligible for Federal Flood Insurance.

(vii) The City and Private Sector have combined to form a Redevelopment Authority for the purpose of redeveloping the downtown. This redevelopment plan will involve new buildings, public improvements and private development to be coordinated with the Flood Control devices through the downtown area.

(viii) Residents along Dry Run Creek have been subject to frequent flooding. The City completed one stage in the flood control project for Dry Run Creek using City funds at a cost of $255,000. A combined effort of the Corps of Engineers and the City is underway providing additional flood control protection for Dry Run Creek residents resulting in cost savings to the Corps of Engineers and the City of Waterloo.

(ix) The U. S. Postal Service recently occupied a new $4 million postal facility adjacent to the flood wall. Coordination between the Corps of Engineers and the Postal Service resulted in savings to the Federal Government.

(x) Assumed maintenance responsibilities of those stages of the Flood Control Project that have been completed.

We have appeared before this distinguished committee in previous years and outlined the goals and objectives which we had set for ourselves with the cooperation of local, State and Federal agencies. Many of these objectives have been attained. We have demolished and rebuilt six flood producing vehicular bridges at a level in excess of the 100-year flood requirements on the Cedar River and Black Hawk Creek at a cost of $7,267,073.

The total local expenditure in public works alone that are directly or indirectly connected to this ambitious flood control and redevelopment program is $35,150,000. We point this out only to assure you that, in addition to the purchase of a considerable amount of the necessary right of way for the flood works, we have proceeded with a total community-wide redevelopment effort using non-Federal funds.

Acquisition and project improvements programs must be carefully correlated with flood control design and construction activities. The activities of each program are carefully staged in advance to assure funding availability, eliminate construction conflicts, and institute coordinated design and development results.

Mr. Chairman, I join those who have submitted statements and testimony in support of this project by asking that funds for the continuation of construction now underway be appropriated as part of the 1982 F. Y. Budget. The Waterloo project, combining redevelopment with flood control, is unique in the Nation. Continued funding will assure proper timing, coordination, and could save the public appreciable expenditures in producing the desired beneficial effects. We sincerely appreciate all the assistance provided us. We believe it has been demonstrated the project has considerable merit.

In conclusion, I would remind the Committee of the serious detrimental effects experienced by the citizens of this region because of the frequent floods resulting in millions of dollars worth of property damage and untold human suffering. We believe that a solution to the past history of economic and human loss can be corrected if additional construction funds for the Waterloo Local Flood Control Project are appropriated during this fiscal year. We are fully prepared to cooperate to achieve these purposes. In so doing, we support the objectives of the President and Congress in the development of the F. Y. 1982 Budget.

STATEMENT OF FEDON N. PETRIDES, ENGINEER FOR WATERLOO COMMUNITY DEVELOPMENT BOARD, AND MEMBER, WATER RESOURCES CONGRESS

My name is Fedon N. Petrides and I reside at 3507 Augusta Circle in Waterloo, Iowa. I am an engineer for the Waterloo Community Development Board and a member of the Water Resources Congress. I regret I am unable to appear before the committee this year, therefore I am submitting this statement for your information.

I am pleased to submit to your committee this prepared document in support of the statements of Mayor Rooff of Waterloo, Iowa, and Mr. Mercer, Community Development Administrator. The feeling of other groups and individuals that have indicated a tremendous support for the Waterloo Flood Control Project are also reflected in the statements.

The City of Waterloo has contributed to the coordinated effort with the U. S. Army Corps of Engineers (Rock Island District) by funding a Central Business District Planning Study, Dry Run Creek Flood Control Study, Blowers Creek Flood Control Study and studies of other drainage areas in the City. Community participation and input were received as part of these studies through meetings and surveys for the planning of the flood control works. The City has also complemented the Federal flood control project by construction of a locally-funded multi-million dollar storm sewer detention flood control project on Dry Run Creek to control "behind the levee" flooding.

Several alternate flood control concepts were evaluated with input provided from community-wide and "interested citizen group" meetings. As a result of the Central Business District Planning Study, a very aesthetically desirable concept, acceptable to the community and the U. S. Army Corps of Engineers, was developed for critical areas of the flood control works. This concept blends the proposed works with the other downtown improvements. Six new locally-funded bridges which are a part of the flood control-urban renewal plan were just completed. These bridges replaced old, low-arch bridges which created obstruction to floods. An additional new bridge is currently under design. The design of the bridge and Flood Control device at the site of the bridge is being closely coordinated with the Corps of Engineers.

The Waterloo flood protection facility has been designed to join with the flood control project under consideration for our neighboring community of Evansdale. Coordination of the Evansdale and Waterloo Flood Control Projects will provide a continuity that will reduce the cost of the projects. This joint and continuous concept of flood works is a long-range cost effective solution we support.

To conclude, Mr. Chairman, I join with other witnesses in support of this project by asking the appropriation of construction funds as soon as practical to continue construction of a project unique in concept performance and public acceptance. We are prepared now, as we have been in the past, to cooperate with the U. S. Army Corps of Engineers to accomplish this goal.

Your favorable consideration of the funding request will prevent loss and damage to property, danger to human life and other suffering that so many times has plagued our community during floods.

Thank you for the opportunity to present my statement to this committee.

STATEMENT OF LEO P. ROOFF, MAYOR, WATERLOO, IOWA

I am Leo P. Rooff, the Mayor of the City of Waterloo, Iowa. I reside at 510 Frederic Avenue, Waterloo, Iowa.

This will be the first year I have been unable to personally appear and present oral testimony on behalf of the Waterloo Flood Control Project. I am being represented today at this hearing by Dale C. Mercer, 1130 Ora Drive, Waterloo, Iowa, a member of the Water Resources Congress and Administrator of Waterloo's Community Development Board. Fedon N. Petrides, 3507 Augusta Circle, Waterloo, Iowa, President of Brice, Petrides & Associates, Inc., consulting engineers, who also has appeared before the committee in the past is unable to attend the hearing, has prepared a statement for the record. Messrs. Mercer and Petrides have been closely involved in our Flood Control effort since its inception.

We are pleased to have the opportunity to inform you of our activities and our needs in the area of flood control.

You will recall that the City of Waterloo has experienced two of the most serious floods in its history brought on by a rainfall deluge in June and July 1969, during which millions of dollars worth of property was damaged and the City was placed in serious economic jeopardy. In 1961, 1962, 1964, 1965, and again in 1968, the City of Waterloo was declared a major disaster area by Presidents Kennedy, Johnson and Nixon. Millions of dollars in emergency Federal financing has been poured into the City during these years to supplement the local expenditures involved in the flood recovery effort. During these tragic experiences, the morale of our people was high and the cooperation of the Federal and State officials was outstanding. The events of the summer of 1969 brought home the necessity of expediting a coordinated Public Works and Capital Improvements Program along with long-range planning.

In comprehensive and thorough discussions carried on with the U. S. Army Corps of Engineers and with other experts in the field of flood control, we concluded that the best tools available to the City of Waterloo in carrying out a flood control program to a successful conclusion, would be to combine it with an Urban Renewal Program, extensive water and sewer installations, a flood plain management program, an increased park and open spaces project, and revitalization and reconstruction of our center city on either side of the Cedar River.

The principal reason we advanced the two programs of flood abatement and urban renewal simultaneously is that it was clear from the point of cost effectiveness that the development of both programs would permit a level of planning and execution that would be most helpful to the locality and would provide the best utilization of local and Federal funds. Coordination of these two unique programs has prevented duplication of efforts.

1980 was a year of continued flood control activities by the Army Corps of Engineers. Additional contracts were awarded by the Corps of Engineers bringing the total to $36 million for the projects to date. Private development as part of the Local Flood Control and Redevelopment efforts continued. Already the 126 acre industrial park which is a part of the unique program is producing environmental gains seldom achieved through standard industrial programs of this magnitude. Altogether 1000 acres of park land, most of it in the flood plain, has been retained for permanent public use.

The citizens of Waterloo join me in thanking you for this invitation to appear as "outside witnesses" in support of a request of continued construction appropriations for the Waterloo Local Flood Control Project. Approximately 79 percent of the project is either under contract or completed. The City is continuing the acquisition of right of way to enable the Corps of Engineers to maintain their construction schedule.

The City of Waterloo is proceeding well in advance of the proposed Local Flood Control Project contained in Housing Document No. 166, which is a letter from the Secretary of the Army to the Committee on Public Works and adopted by the Congress on October 27, 1965 and signed by the President on November 2, 1965.

The City has entered into an ambitious flood plain management program with the Department of Housing and Urban Development, the Iowa Natural Resources Council, the U. S. Army Corps of Engineers, the Waterloo Board of Park Commissioners, and the Riverfront Commission. All of the flood plain area of some 600 acres along Black Hawk Creek has been acquired to prevent future encroachment into the flood plain and is being preserved for park and open spaces use.

Mr. Chairman, I know of no program that has given us more satisfaction than this large-scale redevelopment opportunity for the City of Waterloo. In our opinion, it demonstrates that when local interests embark on bold and imaginative plans and exercise strong local control, the result will be maximum benefits to the Federal and Local Governmental bodies and citizens.

We have repeatedly reassured the Government and the U. S. Army Corps of Engineers that we will meet all the local requirements for flood control construction. Well over $10 million has been earmarked for this purpose. Land acquisition has been impressive and has been coordinated with the planning of various Federal agencies. Numerous local bond issues have been approved by local voters in the last 12 years. We make this point to illustrate the fact that community-wide programs of health services, new schools, new fire stations, and recreational facilities and library, have been favored by the voters to match the ambitious public works and industrial expansion programs being financed in part by Federal programs and private enterprise.

With 79 percent of the Waterloo project either completed or under contract, we are concerned that the Flood Protection Project remain on schedule and completed at the earliest date feasible. The need has been graphically demonstrated with the Cedar River and Black Hawk Creek exceeding flood stage several times in recent years. The awareness of potential flooding causes us to be grateful to Congress and the Corps of Engineers for the work that has been completed on schedule.

Mr. Chairman, it is imperative that we keep this project on schedule. We believe that our requests have been reasonable and timely. The project has received national attention because of the unique manner in which several Federal agencies, the State of Iowa, and the City of Waterloo have been able to coordinate their work. With this in mind and in the public interest, we respectfully request continued inclusion of the Waterloo Local Flood Control Project in the U. S. Army Corps of Engineers Capital Improvements Program.

DAVENPORT LOCAL PROTECTION PROJECT

STATEMENT OF CHARLES WRIGHT, MAYOR, DAVENPORT, IOWA

Mr. WRIGHT. Thank you for the opportunity to testify again. The Davenport project has been in the works since 1970.

A short summary would be that Davenport is the largest city on the Mississippi River which remains unprotected against flood damage. Without congressional action, it is going to be impossible for us to continue to build our downtown area.

The central city of Davenport is the largest standard metropolitan statistical area between Chicago and Omaha and between Minneapolis and St. Louis. The national policy for the last two decades has been consistently supportive of revitalization of the central city. No Federal project will contribute to the revitalization of Davenport inner city as well as the flood control project.

The flood control project has been in a holding position for the last 4 years because of the commitment of the previous administration to review water resources policy. It is a project that is vital to the city of Davenport and we would hope this would be the year where we have authorization of $750,000. One point I would like to make, the $750,000 would safeguard the water plant for the city of Davenport. During the flood, we lose all the supply of water to the city of Davenport. We also lose all flood protection to the city and it would put out of commission our regional sewage facility.

Senator KASTEN. Once more, the subcommittee would like to thank you for your testimony and be assured that your comments and your prepared statement will be part of the permanent record and it is from that record that we will be working to make our final judgments and decisions.

We thank you both for appearing here this morning.

[The statement follows:]

Statement of Charles J. Wright, Mayor, Davenport, Iowa

SUMMARY

The Davenport Project is the focus of a broad-based community effort involving job development and preservation, housing, recreation, environmental preservation, and flood protection. Investments protected exceed $37 million and approximately 12,000 jobs, resulting in an annual economic impact exceeding $145 million.

The City of Davenport is a Central City of 103,036, in an SMSA of 382,981. It is the largest city on the Mississippi remaining without flood protection. The proposed project will provide the following significant benefits:

- Community stability during flood times.
- Revitalization of the Central Business District.
- Protection of Regional Water and Sewage Treatment Plant.
- Continuous riverfront recreational opportunities.
- Preservation of the 162-acre Nahant Marsh.
- Reclamation of 40-acre former City Dump.
- Protection of 1,700 acres of residential, commercial and industrial land.
- Protection of 12,000 existing jobs.

The project would consist of 6,700 L.F. of channel improvements and modifications to five bridges on Blackhawk Creek, 4½ miles of earthen levee, 5,000 L.F. of permanent and movable flood wall along the Mississippi River and protection of marsh and wetlands. It will protect the Central Business District, major industrial areas, low income residential areas, the regional water treatment plant, and the regional sewage treatment plant.

The project costs $38,600,000 of which the Federal share is $33,500,000. The Mayor and Council have agreed to pay the local share of $5,100,000. Unlike other cities, Davenport is in excellent fiscal condition and can readily meet its commitment through the use of unvoted general obligation bonds. The benefit/cost ratio of this project is a favorable 1.17.

REQUESTS FOR CONGRESSIONAL ACTION

The City of Davenport respectfully requests Congress to consider:

1. The authorization of the Nahant Marsh mitigation plan as part of the project purpose and as submitted in the 96th Congress, First Session as S.502 offered by Senators Culver and Jepson and H.R. 3012 offered by Congressman Leach.

2. The authorization of $750,000 to provide project capability to the Corps of Engineers for this project in the F.Y. 1982 Federal Budget.

This year is crucial for this project to progress. The water resources policy has already slowed implementation. Without the authorization of the Nahant Marsh Plan and the funded capability, the Davenport Flood Protection Project cannot proceed to construction since all engineering will be complete by the end of this year.

I. PROJECT DESCRIPTION

A. PROJECT HISTORY/TIMING/STATUS

Shortly after the disasterous flood of 1965, the City Council requested the U.S. Army Corps of Engineers to study and propose a solution for flood control which was authorized by the Flood Control Act of 1970 (P.L. 91-611). Project planning began in January, 1972. Between February, 1972, and September, 1973, 7 meetings were held, including City officials to discuss project alternatives and effects. 6 neighborhood planning sessions were also held for the various project reaches which culminated in the "Preformulation Public Meeting" in July, 1973. The Phase I GDM was submitted to OCE in August, 1976. The SPAC Report on the Nahant Marsh was submitted to OCE in February, 1977, and the final EIS was submitted to CEQ in March, 1978. All changes noted are within the authority of the Chief of Engineers with the exception of the Nahant Marsh mitigation plan which is scheduled for Congressional action. The Phase II Final GDM and the signing of the assurances agreement can be completed in the current fiscal year. The project is currently scheduled to be built under 7 continuing contracts with the dates as follows:

1) Stage I Water Treatment Plant	**3/83**	**to**	**9/84**
2) Stage II Structural Work, I-280 to Gaines Street	**5/84**	**to**	**9/85**
3) Stage III Credit Island Pump Station to Harbor Closure	**5/85**	**to**	**9/87**
4) Stage IV Earthwork I-280 to Gaines St.	**5/85**	**to**	**9/87**
5) Stage V Blackhawk Creek Channel Modification	**6/84**	**to**	**9/86**
6) Stage VI All work, downtown segment	**5/85**	**to**	**11/87**
7) Stage VII Beautification and Recreation	**5/87**	**to**	**12/87**

B. COSTS AND BENEFITS

The recommended plan provides the greatest economic return for the alternatives studied and supported by local interests. However, the proposed FY-82 Federal Budget contains no funds to initiate construction. The Federal first cost of construction is estimated to be $33,500,000 with an estimated annual cost of $3,636,100 assuming a 100 year project life calculated at 7-3/8% interest. The total non-federal contribution is estimated to be $5,100,000 of which $2,549,000 will be cash. Local annual operating and maintenance costs are estimated to be $164,000. Total federal and local project costs will amount to $38,600,000.

Annual project benefits are estimated to be $622,100 in excess of the costs for the project life yielding a benefit/cost ratio of 1.17. Total annual benefits are estimated to be $4,258,200 with flood protection being (39%), recreation (20%), redevelopment (29%), protection of water supply (3%), advance replacement and detour costs (1%) and improved land use (8%). 51,000 persons will benefit directly from the project, exclusive of employees of business establishments.

A funding capability has been expressed by the Corps in past fiscal years, but because of the pending legislation, administrative policy has not allowed the expression of a capability for FY-82. Therefore, Congress needs to authorize such a capability, for without a funded capacility, a water resources review cannt be accomplished. Davenport is therefore caught in a classic "Catch 22" situation which only Congress can resolve.

C. LOCAL ABILITY/COOPERATION

The City has committed to furnishing all land, easements and right-of-way including relocation for the project and also is willing to contribute 50% of the separable costs for recreation features which are significant. The City will finance its share of the project costs through the sale of General Obligation Bonds, which do not require a referendum. The Corps' efforts have been supported by several Councils as expressed in "letters of intent", the latest of which was approved in March, 1979. There has been bi-partisan support of the project at the local level; the City is grateful for the strong local congressional support which has been received; and participating federal and state agencies have endorsed the project's content.

After many years of formulation, the City is willing, capable and anxious to proceed with the project contained in the Phase II GDM. The merits of the project justify its implementation. However, the City of Davenport is financially incapable of undertaking the entire project by itself. State law limits the amount of debt the City can assume.

NATIONAL WATER POLICY

Revisions in the national water policy, which are being considered by the Carter Administration, have broad ramifications in the area of flood protection. Local and regional officials recognize that flood management planning for developed areas with existing problems must be approached differently from programs applied for undeveloped areas. The Bi-State SMSA is at the confluence of the Rock and Mississippi Rivers with urban cores abutting the rivers. Carrying out national water policies in the Quad Cities, particularly with regard to flood control, is too complex to solve by local means. Remedial structural measures are the management techniques which are necessary to reduce property damage in developed urban flood plains along major rivers, and is particularly applicable to Davenport because the adjacent banks of the Mississippi are already structurally protected.

Due to the multiplicity of cities in the Quad Cities region, one project is completed, and five are in some phase of formulation. The cities, which have all selected structural methods of flood control, regard their individual projects as integral elements of a comprehensive approach to managing the region's flooding problem. With structural flood protection 90% completed on the Illinois banks opposite Davenport's project, it is imperative that the Iowa portion begin in order to prevent a partial, and therefore unacceptable solution. Leaving the Quad Cities with only the Illinois side protected will increase the flood in Davenport.

Congress will be discussing implementation of national water policy in this session. The involvement in these deliberations will not include local governments; yet Davenport has concluded that it can reasonably adapt to any resulting changes in national water policy, and we contend that the project is consistent with other national policies and programs. As evidenced in the following justification, the project is equitable, comprehensive and multi-faceted in its approach.

PROJECT JUSTIFICATION

A. FLOOD PROTECTION

The project will provide a 200-year level of protection against frequent and severe flooding for the Mississippi River and a 100-year level of protection for Blackhawk Creek floods. The flood problem area, consisting of 1,700 acres, has been extensively developed for industrial, commercial and transportation purposes. Developments in the area to be protected include 263 commercial properties, 79 industrial plants, 510 residences and 23 public properties. The regional water and sewage treatment plants, rail lines and U.S. Highway 61/67 carrying up to 27,900 vehicles daily will be protected by the flood control project. The developments have been seriously affected by past floods and continue to be vulnerable today.

Major floods occurred in 1951, 1952 and 1965 which respectively caused $1,472,400, $1,989,500 and $11,533,700 in damages at current prices. In the event of occurrence of the design flood, $34,397,000 in damages would be avoided. Floods caused by ice jams have occurred four times in the last 100 years, most recently in 1966. More recent floods have occurred in 1967, 1969, 1973, 1974, 1975 and 1979.

B. ENVIRONMENTAL PROTECTION

In addition to the flood control aspects, a comprehensive plan has been pursued to complement the existing riverfront environment. The project will primarily affect man-made environments which vary in quality. 20 acres of low-land woods and 120 acres of acquatic environment will be affected, but two significant areas of wetland timber, an old dump and a marsh will be improved by the project. The former City dump, closed in 1972, will be reclaimed for recreation by the deposit of dredged material for a topsoil cover and by mitigating the possible impact that leachate has on water quality. The Nahant Marsh property, comprising 163 acres, will be acquired and preserved for research, education and nature observation. The life expectancy is low if enhancement and mitigation are not pursued because of urbanization in the watershed. The proposed improvements will duplicate the hydrologic processes to which the marsh owes its existence and create a vegetative species succession returning the area from sedge to acquatic species. The preservation plan is recommended by several governmental agencies and is in accordance with the National Environmental Protection Act of 1969 and the Fish & Wildlife Coordination Act of 1958.

Environmental quality would also be significantly reduced if the regional sewage and water treatment plants were flooded, affecting over 140,000 persons in 4 cities and unincorporated Scott County. With the project, the domestic water supply system will not be contaminated or become inoperative or ineffective, and pollution from discharges will not affect the acquatic, wildlife and human environments. These efforts are in conformance with the Federal Water Pollution Control Act Amendments of 1972 and the Safe Water Drinking Act of 1974.

The effects of increased flood heights caused by the project on nearby communities and similar projects would be minimal because they are already protected. The level of protection is the same as the existing Rock Island project across the river, the surface profile would be raised less than one foot for one to two miles upstream of the project, flood waters will not rise below the project and in the other areas the river will assume its natural flow characteristics.

C. RECREATION IMPROVEMENT

Recreation is also a significant aspect and part of the project purpose as authorized by Congress. LeClaire Park's use in the downtown will be intensified to provide docking facilities for excursion boats, passive recreation and space for major outdoor events. A new 40-acre park will be developed on the riverfront to provide for family recreation and athletic activities. The continued use of the riverfront stadium will be preserved by the project. Credit Island, a 250-acre City owned park, will be improved for uses which are adapted to flooding, since it will not be inside of the protection system. Camping and water oriented uses will be added, and an existing golf course will be improved. Finally, a scenic road and bicycle path will connect the entire riverfront into a system and could be incorporated into the Great River Road System.

The recreation facilities will allow utilization of the flood control structure by the public and provide opportunities for day use and weekend activities. The entire reach of the riverfront will for the first time be accessible, and the variety of facilities will make the riverfront attractive and useable for all ages and interest groups.

D. ECONOMIC STABILITY AND SOCIAL WELL BEING

Community stability during flood times is disrupted by property damage, deterioration of buildings, lapses in employment and increases in health and safety hazards. Large sums of public and private money are needed to combat the destructive forces during floods and for cleanup and reconstruction after these events. The project will minimize the change in established land uses from that which now exists and optimize the conditions for long-term occupancy and neighborhood cohesion and stability.

Jobs development is today a critical national issue. Davenport has actively contributed to a healthy national economy. With more than 160,000 employees who work and live in the Quad Cities, our community is seeking to retain existing jobs and develop new employment centers. Besides the direct impact that the project would have on employment, 65 acres of industrial land could be developed, and existing employers would remain at their present locations. Rising costs on all fronts have forced the City's second largest employer, Oscar Mayer and Company, with 2,000 workers, to consider leaving its existing plant which is now valued at $26,000,000. This company alone is a powerful economic force in this community and the region having an annual payroll of $30,000,000 and payments to farmers in excess of $100,000,000. Of the 4,500 workers who are employed in the downtown, more than one-half are directly affected through actual or indirect displacement from their jobs during times of periodic flooding. Improvements have been deferred and major projects have been held in abeyance until flood construction funds are available.

E. NATIONAL URBAN POLICY AND DOWNTOWN REDEVELOPMENT

Without the flood control project the City of Davenport stands to lose a downtown redevelopment program that is estimated to be at least 25% greater than the construction cost of the flood control system. Projected at more than $38,700,000 over the next ten years, the development would be concentrated along 1,800 lineal feet of the downtown portion of the system. Since virtually all of the improvements would be located in the flood plain (including housing, parking, businesses, commercial retailing and convention/hotel accommodations), the flood control system is absolutely essential in order to get them underway. These improvements are supplemental to the $15.1 million of assessed real property value in the downtown that are part of the current benefit/cost ratio of the system.

As one of 322 "distressed cities" under the 1977 Housing and Community Development Act, Davenport has experienced aged housing stock, growth and job lag as well as pockets of poverty much of which is concentrated in and around the downtown. While commercial values increased city-wide in 1977 by 39.3%, downtown property showed no increase in value. At the same time prime downtown land declined from $2,400 R.F.F. in 1966 to $1,900 R.F.F. in 1977 in spite of a 29.6% assessment increase during this time. Since the 1965 flood, properties in the flood plain have been devalued by an average of 50%, and only one new building was constructed in this fifteen year period. Flood control will provide a base upon which Davenport can launch projects consistent with the National Urban Policy.

CONCLUSION

Davenport is the largest city on the Mississippi River which remains unprotected against flood damage. It is the only city in the Quad Cities Metropolitan area without flood protection. Without Congressional action, the central city of the largest SMSA between Chicago and Omaha and between Minneapolis and St. Louis will see its core and chief industrial areas repeatedly damaged and begin an irrevocable decline. National policy for the last two decades has been consistently supportive of revitalization of the Central City and its urban core. No Federal project will contribute to the revitalization of Davenport's inner-city as will this Flood Control Project.

GREAT LAKES REGION WATER RESOURCE PROGRAM

STATEMENT OF JIM FISH, EXECUTIVE DIRECTOR, GREAT LAKES COMMISSION

Senator KASTEN. Next, we would like to ask Mr. Jim Fish, executive director of the Great Lakes Commission, to come forward.

Mr. FISH. Thank you, Mr. Chairman.

My statement has been submitted and I believe you have copies. I would ask that it be entered into the record.

Senator KASTEN. Without objection, it will be entered into the record and we very much appreciate your offer to summarize your statement.

Mr. FISH. You are familiar with the Great Lakes Commission as an interstate compact commission of the eight States bordering the Great Lakes. Our statement on water project funding begins with a report of the general feelings within the region.

While there is a great concern for the water programs in the country, while the water managers and elected leaders in the Midwest would not deny development to any other area, there is a constant frustration over the minimum activity in the Midwest.

We are also very familiar with the user fee situation, having the St. Lawrence Seaway where we are required to repay the Federal Government over $67 million over its 22-year life. So, we are not surprised to see this happening in other areas.

I have attached to my testimony an annotated listing of proposed and supported water projects in the Great Lakes region and hope that this will be of help to the committee.

During the course of the hearing, I believe that Ohio and New York plan to offer oral testimony, and Illinois will be submitting a written presentation for your reference.

PROGRAM BALANCE

There is one significant aspect of the Great Lakes program which we found to be of great concern. Approximately 75 to 80 percent of our annual budget goes to operations and maintenance activities and only 13 percent goes for new construction. Comparing this to the national program where approximately 58 percent goes to new construction and 37 percent to operations and maintenance.

We looked at that and wonder what is happening when one project—and you can select any number of them from the South or Southwest—would total the whole funding that provides for the Great Lakes system from Duluth all the way to the first lock on the St. Lawrence Seaway.

WATER RESOURCES POLICY AND PLANNING

The disparity remains to be a concern of our national approach to water management, water policy, and program coordination which is the balance of my presentation.

Already, I am sure everyone is familiar with many agencies and departments, subagencies, divisions that handle water efforts. The study done by the Water Resources Council in 1975 came up with over 70 appropriations accounts; 32 subpurposes, 12 primary purposes.

Speaking directly to the Water Resources Planning Act, the Great Lakes Commission believes that it must be completely revised if the Water Resources Council is to meet the policy coordination expectations of Congress and the needs of the present water situation. As authorized in 1965, the Council simply did not have the authority needed to perform as envisaged.

Mr. Chairman, we have provided both to members of this committee in the past and to members of the authorizing committee an outline of legislation to reform the Water Resources Planning Act.

Forty-five States now, by our tally, have supported that conceptual outline. We would hope that this committee might provide funding so that a revised Water Resources Planning Act could be accomplished through the authorizing committees.

With regard to the block grant concept, which is also under consideration, there is a great deal of disparity and concern between the States. To put it simply, the States aren't sure what the final impact will be. Some have indicated support, some have indicated opposition, but most have indicated they don't know yet because there has been no economic analysis.

However, a revised Water Resources Planning Act would be the foundation for a block grant program should the administration and/or the Congress choose to go ahead.

Looking at the subject of water management, which includes all of the aspects of the projects—planning and maintenance of completed projects—our commission members considered the question of an office of national water policy in the Department of the Interior.

Again, to put it simply and directly, the vote was a unanimous "No." An independent agency should be, in their opinion, the focus for coordination of the Federal water policy.

We would hope that a revised Water Planning Act with sufficient funding could be the vehicle to work directly with Congress and with the States to work out the necessary policy changes. In terms of appropriations recommendations we would hope that funds could be made available for the Water Resources Planning Act, subject to passage of reforms along the lines suggested.

And second, that the proposed revision of funding for planning grants of the States already underway in this fiscal year could be rejected so that the States' capacity could continue to function.

There will be layoffs of qualified State personnel if this is implemented.

PREPARED STATEMENTS

Mr. Chairman, that ends my prepared statement. With your permission, I would also like to enter into the record the statement of Mr. Clair Guess from the Interstate Conference on Water Problems, who requested that I bring this to your attention. His statement, I believe, makes some similar points to mine in regard to the Water Planning Act and a number of additional points.

Senator KASTEN. There are a couple of questions which have come up having to do with your reactions to the President's recommendations to terminate the Water Resources Council and particularly the new administration creating a new Office of Water Resources policy which would be funded at a relatively low level. It is my understanding that you referred to part of this in your testimony.

We don't have time right now to deal with the questions back and forth, but the committee may ask you to prepare some answers to some of our questions as we develop responses to the administration.

Would you agree to make yourself available to answer these questions?

Mr. FISH. I would be most pleased to answer either in writing or to return at a time which is convenient for the committee or to meet with staff at their convenience.

Senator KASTEN. Thank you very much, Mr. Fish.

We appreciate your participation this morning and the statements will be entered into the record at this point.

[The statements follow:]

STATEMENT OF JAMES FISH, EXECUTIVE DIRECTOR, GREAT LAKES COMMISSION

The Commission was formed in 1955 by the eight States which border on the Great Lakes. Among other responsibilities, it represents the collective views of the eight States to Congress on water resources issues. The Commission's concerns range from regional economic issues such as industrial development, employment, imports and exports, ports and shipping to the resources management issues of water supply, water quality and fisheries management. This compact commission was instrumental in gaining passage of the original Water Resources Planning Act in 1965. Following that, our Commission led the way in formation of the Great Lakes Basin Commission permitted under the Act, and we sit on that Commission. In short, the Great Lakes Commission has had a continuous involvement since 1965 with the Water Resources Council and a river basin commission formed under the provision of the Water Resources Planning Act. The Great Lakes Commission is funded solely by annual appropriations from each of the member States and receives no Federal funding for operations, projects, or programs -- nor has the Commission sought Federal funding for any special projects of its own.

My statement on water project funding must necessarily begin with a report on the general feelings expressed in the Great Lakes water development community. Simply put, water managers in the Midwest see major projects and programs going forward in the South and West -- and very little happening in their own area. Appropriations for one project in the South or West generally exceeds the total funding for the Great Lakes hydrologic region. While water managers and elected leaders in the Midwest would not deny development to any other area, there is constant frustration over the minimum activity in the Midwest. Further, current discussion of user fees is not surprising to the Great Lakes water transportation community. For over twenty years, users of the St. Lawrence Seaway have paid the price of a user fee -- to the tune of $67 million U.S. funds. We operate a transportation system which has returned capital to the U.S. Treasury for each of its 22 years of operation.

Great Lakes Projects

I have attached an annotated listing of proposed and supported water project funding. I will not detail it in this testimony, nor do I necessarily expect it to be included in the record of this hearing. It is submitted for use by Members of the Committee and staff as you proceed in your scheduled mark up. During the course of your hearing, you will also hear specific testimony from Great Lakes States. Both New York and Ohio have indicated they plan oral testimony and Illinois plans to submit a written presentation.

There are several areas of the proposed budget that should be emphasized, however. First, operations and maintenance at approximately 57% of the Great Lakes budget represents the largest category of outlay in the system. In addition to maintaining the system, critical to retaining the investment already made by Federal, State and local governments, this category also provides the basis for ongoing environmental studies crucial for such efforts as season extension in the St. Mary's River reach of the system.

The diked disposal funding, a major requirement on the Great Lakes system at 20% of the budget assures that polluted materials will be adequately managed over extended periods of time. Because most the the diked disposal areas are being constructed to serve existing projects, it can be safely stated that well over 75% of the proposed Great Lakes civil works budget is committed to maintenance of the system. This is in comparison to a national program which applies only about 37% to O & M and 58% to new construction.

This disparity for the Great Lakes system leads many in the region to be concerned about the national approach to water management, water policy and program coordination, which will occupy the balance of my presentation.

Water Management Coordination

The need for water management coordination has been established in studies beginning with those initiated by President Theodore Roosevelt in 1908. In the years since, many government financed studies, including the National Commission on Water (1969-73) recommended strengthening Federal coordination.

The need for coordination was exemplified in the report of the U.S. Water Resources Council, "Planning and Cost Sharing Policy Options for Water and Related Land Programs" (November 1975). In this comprehensive summary of Federal and federally assisted water and related land programs the study team found "a total of 7 departments and 7 independent agencies -- including 18 agencies within the 7 departments -- with a water function or involvement." These activities were financed through 70 appropriations accounts. A total of 12 major water resources categories were identified with 32 subpurposes, representing a full range of financial assistance options to effect the purposes.

Since 1975 there has been no major change in this diversity of Federal involvement. Clearly, if water problems are to be solved, coordination in policy development, planning and implementation is a requirement.

The Water Resources Planning Act

The Great Lakes Commission believes that the Water Resources Planning Act must be completely revised if the Water Resources Council is to meet the policy coordination expectations of the Congress and the needs of the present water situation. As authorized in 1965, the Council simply did not have the authority needed to perform as envisioned. Reformed, the Council can provide a vehicle for effective coordination of Federal water policy.

For several years, the States individually and collectively have gone to the Congress and requested reform of the Water Resources Planning. Act. Each year since 1975, they have been told that such reforms will come "next year." This "next year" -- 1981 -- has potential for widespread national drought, and there is substantial need for the kind of Federal policy development and coordination that a reformed Council can provide. With a new Administration and a new approach in Congress, it should be possible to deal with this need, particularly since recommendations for reform have been developed which have widespread support by the States and which reflect recommendations from numerous studies since 1965.

Because of the recurring impasse in water legislation, last year the Great Lakes Commission formulated its own draft legislation to revise the Water Resources Planning Act. Following intense discussions among the States, this legislation was refined and recommended by the staff group for the National Governors' Association Subcommittee on Water Management, of which 22 States are members. This legislation would make the Water Resources Planning Act a much more effective policy instrument and would involve the States directly in the policy decisions. Essentially, the legislation would:

- provide an independent WRC Chairman
- reform Council membership
- legislate a role for the States
- provide annual reports to Congress on program and project needs including project lists developed by States
- provide for Congressional review of major WRC rules, such as Principles and Standards revisions
- reform the appointment and reporting process for river basin commissions so as to make them more responsive to States' needs
- expand and redirect the State grant program

Other than the staff of the NGA Subcommittee, headed by Governor Scott Matheson of Utah, this legislation is also supported by a recent survey taken by the Interstate Conference on Water Problems which indicates that 40 States and several intra state organizations essentially support the draft. Additionally, the Western States Water Council also completed a survey just recently of the 12 member States, and the eight responding indicated support for this legislation. I haven't compared the surveys, but it would seem that at least 45 States support it. Copies of the draft legislation have been submitted to the authorizing Committee members. Please note that the current draft does not include an independent review of water projects as proposed by the previous Administration.

Water Resources Planning Act Relationships to Block Grant Concept

It is understood that Congressional committees may also take up a block grant proposal proposed in the Senate by Senators Dominici and Moynihan (S.621). Because this represents a different approach to the water projects process, a short review of comments about that proposal may be helpful. Since S.1241, a predecessor bill, was first introduced (May 1979), the States have been debating the merits of the bill, but with no resolution. Some States -- those with large land areas and/or populations -- do support the bill. The remainder either are opposed or have been unable to reach any definitive stance. Also, there has been no economic analysis of the impact of the bill on the respoective States. Serious doubts have been expressed that there can be resolution and agreement on the merits of this proposed legislation early in this session.

S.621 and its predecessors bills call for administration of the block grants to the States by the Water Resources Council. Discussions among the States about the block grant proposal have generally concluded that the three titles of the Water Resources Planning Act -- policy coordination among Federal agencies, regions, State/Federal planning and program coordination, and water planning/management matching grants to States would be required to support this legislation. A reformed Water Resources Planning Act, in place before block grants for water programs is initiated, should assist in effective implementation of the new block grant approach. There is excellent support for the NGA/GLC legislation and there is pressing need to resolve the impasse over the Water Resources Planning Act. With the changes needed and now possible, and with a drought situation looming, I sincerely believe that Congress should and can act swiftly to replace the current mechanism, as a first step to resolving water policy issues.

Water Policy Set by Interior?

There has been much criticism of the Water Resources Planning Act and the Water Resources Council over the past several years. Some is fully justified. However, much of the Council's excellent work has been totally ignored in the negative atmosphere. Secretary Watt, for example, has presented the Council as an organization committed only to stopping projects, singling out the independent project review imposed by President Carter as a reason for Council dissolution. The independent review can be eliminated by a two line executive order. Secretary Watt has also campaigned to have water policy transferred to Interior on this basis. The essential issue is: should the Department of the Interior determine water policy? It should not, in the view of the Great Lakes Commission. We fail to understand the drive to place water policy in the hands of a single mission oriented agency -- Interior -- when that agency's experience is primarily limited to western programs. There is no expertise in ports, waterways, or waste water treatment. Experience in flood control is limited and primary municipal supply experience is limited to hydrologic characterization. The eight Great Lakes States are flatly opposed to such a proposal. Most other States are also opposed, including a number of Western States.

Water Resources Planning Act and Policy Reform

A reformed water Resources Council could and should take up immediately, water policy reform, including analysis of the block grant proposal, particularly the economic impact on States as well as other pressing issues such as the Principles and Standards which would continue to affect large, interstate projects. Reform legislation for the Council could direct it to work closely with the Congress and the States to review of water policy and programs and recommend changes. A definite (but realistic) deadline could be set. Such a study and recommendations would provide the Congress with a true test of the ability of the Council to perform.

Overall, a reformed Water Resources Planning Act and the reformed Water Resources Council should provide a continuing coordination mechanism between the numerous Federal agencies involved in water management. When conflict between agencies is identified, and cannot be resolved through administrative processes, the Council would bring it to Congress for consideration and resolution. Most importantly, active strong coordination should help both State and Federal agencies to meet future water needs -- whether through new development or improved management of existing sources.

Given sufficient authority and cooperation, if the Council cannot provide this to Congress, the Congress would be fully justified in terminating the Water Resources Planning Act.

Appropriation Recommendations for Water Resources Management

1. That funds be made available for the Water Resources Planning Act, subject to passage of reforms along the lines suggested.
2. That the Administration proposed recision of water planning grants to the States (Title III) be rejected so State capacity may be continued to function.

GREAT LAKES BASIN CIVIL WORKS PROGRAM
FY 1982 CARTER AND REAGAN BUDGET REQUESTS
AND CORPS OF ENGINEERS PROJECT CAPABILITIES

- Regional and State Projects -

	Carter FY 1982 Budget	Reagan FY 1982 Budget	C of E FY 1982 Capabilities
Total for Great Lakes	$105,017,000	$104,562,000	$126,376,000
Construction, Planning & Study Projects	22,477,000	22,022,000	27,047,000
Construction	13,815,000	13,815,000	15,805,000
Advance Eng & Design (Planning)	490,000	490,000	985,000
General Investigations	7,824,000	7,369,000	9,729,000
Special Studies	348,000	348,000	528,000
Operations & Maintenance	60,822,000	60,822,000	75,318,000
Diked Disposal Areas	21,718,000	21,718,000	24,011,000
Construction			
Navigation Projects	9,115,000	**Except as noted on page 2 - Reagan Budget detail is the same as Carter Budget**	10,895,000
Little Calumet River, Ill	115,000*		115,000
Cedar River Harbor, Mich.	-0-		380,000*
Knife River Harbor, Minn.	-0-		550,000
Cattaragus Harbor, N.Y.	2,000,000*		
Irondequoit Bay, N.Y.	100,000*		100,000
Port Ontario Harbor, N.Y.	-0-		850,000*
Ashtabula, Ohio	5,300,000*		5,300,000
West Harbor, Ohio	1,600,000*		1,600,000
Flood Control Projects	3,700,000		3,910,000
Saginaw River, Mich.	500,000*		500,000
Danville, N.Y.	-0-		210,000
Ellicott Creek, NY	150,000*		150,000
Point Place (Toledo), Ohio	3,050,000*		3,050,000

Beach Erosion projects	1,000,000		1,000,000
Presque Isle (Erie) Penna.	1,000,000*		1,000,000
Advance Engineering & Design			
Navigation projects	235,000		465,000
St. Clair R. middle channel	-0-		65,000*
Black R., Alcona Co., Mich.	-0-		85,000
Cross Village, Mich.	85,000*		150,000
Forestville, Mich.	-0-		80,000
Geneva-on-the-Lake, Ohio	150,000*		150,000
Flood Control projects	255,000		520,000
Lower Clinton River, Mich.	155,000*		420,000
Reno Beach, Ohio	100,000*		100,000
General Investigations			
Navigation surveys	2,879,000	2,789,000	3,394,000
Connecting channels	1,010,000*		1,010,000
Seaway locks improvement	400,000*		400,000
Great Lakes-Hudson River Waterway	300,000*		300,000
Lake Erie coast	-0-		120,000
Highland Park, Ill.	-0-		100,000
Illinois shore to Wis. line	-0-		125,000
Hammond, Ind.	-0-		100,000
Petoskey, Mich.	-0-		70,000
St. Joseph, Mich.	90,000	-0-	90,000*
Duluth, Minn. - Superior, Wis.	102,000*		102,000
Buffalo, N.Y.	500,000*		500,000
Cleveland, Ohio	202,000*		202,000
Lorain, Ohio	275,000*		275,000
Flood Damage Prevention surveys	4,945,000	4,580,000	5,535,000
Great Lakes, Metro areas	653,000		653,000
South end of Lake Michigan	100,000*		150,000
Chicagoland Underflow Plan	2,550,000*	2,185,000	2,550,000
Little Calumet River, Ind.	214,000*		214,000

Kalamazoo River, Mich.	-0-	200,000
Saginaw River, Mich.	295,000	295,000
Cattaragus Creek, N.Y.	-0-	100,000
Oswego River basin, N.Y.	600,000 *	600,000
Cuyahoga River basin, Ohio	50,000 *	125,000
Fox River & Tributaries, Wis.	383,000 *	383,000
Ohio western Lake Erie shore	100,000 *	265,000
Beach Erosion	-0-	800,000
Illinois shore, Lake Mich.	-0-	300,000*
Lake Ontario shore	-0-	500,000*
Special studies	348,000	528,000
Lake Erie wastewater management	348,000 *	348,000
Diversion of Lake Michigan waters	-0-	180,000*
Operations & Maintenance	60,822,000	75,318,000
Connecting waterways; St. Marys, St. Clair & Detroit rivers & Lake		
St. Clair (4- -4 projects)	16,809,000	19,865,000
Illinois (3- -4 projects)	1,256,000	1,406,000
Indiana (1- -1 project)	563,000	563,000
Michigan (33- -37 projects)	16,096,000	22,090,000
Minnesota (1- -1 project)	145,000	145,000
Minn.-Wis. (1- -1 project)	1,978,000	1,978,000
New York (4- -7 projects)	4,051,000	6,181,000
Ohio (8- -10 projects)	15,525,000	16,785,000
Pennsylvania (1- -1 project)	166,000	1,366,000
Wisconsin (8- -11 projects)	4,233,00	4,939,000
Diked Disposal Areas	21,718,000	24,011,000
Detroit River	1,219,000*	1,219,000
Calumet River & Harbor, Il.	2,684,000*	2,684,000
Chicago Harbor, Ill.	1,342,000*	1,342,000
Chicago River, Ill.	2,684,000*	2,684,000
Waukegan, Ill.	108,000*	108,000

Indiana Harbor, Ind.	108,000*	108,000
Michigan City Harbor, Ind.	-0-	170,000
Alpena Harbor, Mich.	-0-	100,000
Big Ben Harbor, Mich.	-0-	100,000
Clinton River, Mich.	-0-	500,000
Frankfort Harbor, Mich.	-0-	523,000
Keweenaw Waterway, Mich.	-0-	100,000
Lexington Harbor, Mich.	-0-	100,000
Menominee Hbr., Mich. & Wis.	-0-	100,000
Monroe, Mich.	7,288,000*	7,288,000
New Buffalo Harbor, Mich.	-0-	100,000
Port Austin Harbor, Mich.	-0-	100,000
Presque Isle Hbr., Mich.	-0-	100,000
St. Joseph Harbor, Mich.	-0-	100,000
Rouge River, Mich.	397,000*	397,000
Saginaw River, Mich.	1,678,000*	1,678,000
Ashtabula, Ohio	220,000*	220,000
Sandusky Harbor, Ohio	-0-	200,000
Kewaunee, Wis.	290,000*	290,000
Sheboygan, Wis.	3,700,000*	3,700,000

* Projects & funding recommended by Great Lakes States

GREAT LAKES BASIN CIVIL WORKS PROGRAM
FY 1982 CARTER AND REAGAN BUDGET REQUESTS
AND CORPS OF ENGINEERS PROJECT CAPABILITIES

OPERATION AND MAINTENANCE ACTIVITIES

- Regional and State Projects -

	Carter FY 1982 Budget	Reagan FY 1982 Budget	C of E FY1982 Capabilities
Regional waterways	16,809,000		19,865,000
Detroit River	5,316,000		7,757,000
Lake St. Clair	660,000		660,000
St. Clair River	823,000	No changes reported	823,000
St. Marys River	10,010,000	for Reagan Budget -	10,625,000
		All O&M supported to	
Illinois	1,256,000	the extent funds	1,406,000
Calumet Harbor & River	406,000	available	406,000
Chicago Harbor	462,000		462,000
Chicago River, North Br.	-0-		150,000
Waukegan Harbor	388,000		388,000
Indiana	563,000		563,000
Burns Waterways Harbor	563,000		563,000
Michigan	16,096,000		22,090,000
Arcadia Harbor	105,000		105,000
Black River (Port Huron)	551,000		551,000
Black River Harbor	156,000		156,000
Bolles Harbor	-0-		453,000
Caseville Harbor	557,000		557,000
Charlevoix Harbor	187,000		187,000
Cheboygan Harbor	793,000		793,000
Clinton River	-0-		253,000
Frankfort Harbor	1,566,000		1,566,000
Grand Haven & Grand River	578,000		945,000
Grand Traverse Harbor	566,000		566,000
Harbor Beach Harbor	727,000		727,000
Holland Harbor	232,000		490,000
Inland Route	189,000		491,000
Keweenaw Waterway	283,000		1,364,000
Lac LaBelle Harbor	192,000		192,000
Leland Harbor	149,000		149,000
Lexington Harbor	440,000		440,000
Little Lake Harbor	178,000		278,000
Ludington Harbor	111,000		111,000
Manistee Harbor	161,000		323,000
Monroe Harbor	758,000		758,000
Muskegon Harbor	321,000		453,000
New Buffalo Harbor	912,000		912,000
Ontonagon Harbor	460,000		730,000
Pentwater Harbor	234,000		234,000
Petoskey Harbor	-0-		100,000
Point Lookout Harbor	830,000		830,000
Port Sanilac Harbor	198,000		469,000
Portage Lake Harbor	233,000		233,000
Rouge River	1,157,000		1,157,000
Saginaw River	1,662,000	No changes reported	3,411,000
Saugatuck Harbor	275,000	for Reagan Budget -	275,000
Sebawaing Harbor	26,000	All O&M supported to	26,000
South Haven Harbor	359,000	the extent funds	359,000
St. Joseph Harbor	750,000	available	1,282,000
Traverse City Harbor	-0-		164,000
Minnesota	145,000		145,000
Two Harbors	145,000		145,000
Minnesota-Wisconsin	1,978,000		1,978,000
Duluth-Superior Harbor	1,978,000		1,978,000
New York	4,051,000		6,181,000
Barcelona Harbor	-0-		300,000
Black Rock Channel	1,232,000		1,232,000
Buffalo Harbor	1,769,000		1,769,000
Olcott Harbor	-0-		200,000
Oswego Harbor	567,000		567,000
Rochester Harbor	483,000		1,983,000
Wilson Harbor	-0-		130,000
Ohio	15,525,000		16,785,000
Ashtabula Harbor	402,000		402,000
Cleveland Harbor	7,412,000		7,412,000
Conneaut Harbor	1,248,000		1,248,000
Fairport Harbor	865,000		865,000

	Carter FY 1982 Budget	Reagan FY 1982 Budget	C of E FY1982 Capabilities
Regional waterways	16,809,000		19,865,000
Huron Harbor	392,000		392,000
Lorain Harbor	457,000		457,000
Rocky River Harbor	-0-		1,000,000
Sandusky Harbor	1,076,000		1,076,000
Toledo Harbor	3,673,000		3,673,000
Vermilion Harbor	-0-		260,000
Pennsylvania	166,000		1,366,000
Erie Harbor	166,000		1,366,000
Wisconsin	4,233,000		4,939,000
Ashland Harbor	622,000		622,000
Fox River	1,511,000		1,511,000
Green Bay Harbor	774,000		774,000
Kewaunee Harbor	430,000		430,000
Manitowoc Harbor	374,000		374,000
Milwaukee Harbor	166,000		166,000
Pensaukee Harbor	-0-		150,000
Port Washington Harbor	101,000		219,000
Racine Harbor	-0-		338,000
Saxon Harbor	-0-		100,000
Sturgeon Bay Harbor	255,000		255,000

STATEMENT OF CLAIR P. GUESS, JR., CHAIRMAN, INTERSTATE CONFERENCE ON WATER PROBLEMS, AND CHAIRMAN, SOUTHEAST BASINS INTER-AGENCY COMMITTEE, AND EXECUTIVE DIRECTOR, SOUTH CAROLINA WATER RESOURCES COMMISSION

My hope was to personally present this statement to you on March 24, however, the agenda was filled, and I present this statement for the proceedings of the hearing.

I am Clair P. Guess, Jr., Chairman of the Interstate Conference on Water Problems, Chairman of the Southeast Basins Inter-Agency Committee and, for the past 14 years, Executive Director of the South Carolina Water Resources Commission. However, after 40 years experience, serving in the public and private sectors involving a wide spectrum of natural resources, I pose as no expert for I feel this Nation's involvement in natural resource affairs has just begun. Water and related land resources in particular are vital to this Nation's well-being, and they are of prime importance to every state and to the smallest of communities. Current trends forecast in budget cuts, the creation of a national water policy division in a single department of the Federal government, and rescinding of prior appropriations in the form of matching grants to states in mid-year, are frustrating, disruptive, and confusing. Further, by these actions and more, a breach of confidence exists that will be very difficult to reverse.

Today, I am speaking on behalf of the Interstate Conference on Water Problems, an institution created in 1959. Its membership is constituted by state, intrastate and interstate officials concerned with water resources administration and related matters.

With this as a background, I wanted to let you know that the ICWP continues to strongly support coordination of federal water policy and programs, with an effective voice for the states in such formulation; and a continued grant program to the states for water resources planning, expanded to include management as well as effective water resources planning on hydrologic boundaries. In short, ICWP views reform of the Water Resources Planning Act as a priority issue for the attention of the Congress. For several years, our organization and others, s well as individual states, have been told that such reform would come "next year." With a new Administration in office and a party platform proclaiming commitment to a state voice in water resources policy and state management of the resources, this must be the year for sound reforms in a truly federal-state cooperative effort.

There is be an urgent need to take immediate steps to amend and reauthorize the Water Resources Planning and Coordinating Act of 1965 (P.L. 89-80). On behalf of the membership of the Interstate Conference on Water Problems, while serving as its Chairman, I am empowered to seek your support and any action you deem necessary to accomplish this task early in this session of Congress.

ICWP proposed amendments to P.L. 89-80 are based on more than six years of study, and they are quite similar to the position taken by the Sub-Committee on Water Resources of the National Governors' Association chaired by Governor Scott M. Matheson of Utah.

In November, 1980, the 58 constituents of the ICWP, including state, interstate and intrastate water resources officials, were polled on this issue. Forty responded and, with few minor exceptions, they expressed agreement with the ICWP draft of proposed amendments to P.L. 89-80. We have worked hard to achieve, among other items, responsible federal water policy and program coordination and a voice for the states in such undertakings. Copies of this proposed draft have been provided to members of the House and Senate, including members of your committee, Mr. Chairman.

The Water Resources Council, despite the many current critical statements, has been responsive to the intent of Congress when viewed over the long span of time and in the perspective of the limitations imposed by the Act itself. Since the onset of the Carter Administration, however, the effectiveness and responsiveness of the Council greatly diminished due to the nature of the appointments to the staff and of the Council Members themselves. Additionally, the Council was inappropriately dominated by the Interior Department Chair committed only to an environmental viewpoint. As a direct result, the Council has not received necessary Congressional reauthorization legislation and has been subjected to very harsh and often inappropriate criticism. However, there still remains, regardless of comments to the contrary, a great need for a sustained national effort in support of water and land related resources planning, management and conservation based upon the individual state or interstate needs.

Mr. Chairman, the states are unified on what reforms we want in the Water Resources Planning Act. Let me outline those reforms.

Council Membership

Streamline the membership and firm up the decision process so that a single agency cannot veto decisions. Members should be (1) an independent Chairman -- I'll come back to that; (2) the Secretaries of Agriculture, Army, Commerce, HUD, Interior and the Administrator of EPA. Non-voting members should include the Secretary of Energy, the Secretary of Transportation, the Administrator of the Federal Emergency Management Agency, and the Chairman of the State Advisory Council.

Independent Chairman

The states do not feel that any federal agency should be permitted to dominate water policy. Unfortunately, it tends to cause some regional splits and also tends to distort development of policy. The independent chairman should be a high level Presidential appointee confirmed by the Senate so that he is also responsible to Congress.

State Advisory Council

We feel a fairly large advisory council should be established so that all the necessary views and geographic interests are addressed. We want this legislated so that there is a definite role which cannot be reversed by arbitrary decision. Regardless of the many commitments to consult with the states made by various administrations, it always seems to go astray. We hope this will firmly establish that water policy is a matter for state participation and a prime responsibility for states in its administration.

We have agreed upon several steps to increase the interface between federal agency programs, budgets, water policy decisions of the Council, and state and regional planning, as well as with the Congress. Those include regular reporting by the Council to the President and the Congress on needs and recommendations.

Principles and Standards

We need to step back and take a serious look at the Council's latest revisions of the Principles and Standards, and a redirected Council can certainly do that. Further, there must be a built-in mechanism for Congressional review of the changes in the Principles and Standards, but it should not have a provision for automatic repeal if the Congress fails review.

Independent Project Review

The matter of independent project review by the U. S. Water Resources Council (as currently constituted) is not supported by ICWP, and we concur in the sentiments of the Congress to that end. We strongly support the role of the Congress in maintaining a strong voice in project evaluation, selection and funding support. However, we also believe that the Congress can obtain a clearer view of project proposals when they are handled with coordination and cooperation from the states. The interface of states working with federal water resource authorities has been one of the strongest and most often overlooked virtues of the Water Resources Planning and Coordination Act of 1965. For these often unaccounted values are a basis for our seeking reform, extended authorization and adequate funding for an amended P.L. 89-80.

River Basin Commissions

States overwhelmingly support the need for regional -- interstate -- planning for water resources. Title II of the Water Resources Planning Act presently addresses this. Formation of Commissions is at the option of the states and we recommend that it should remain so. However, states should have more participation in the selection of the Chairmen. Additionally, the link between the Council and the Commission should be strengthened by appointment of Commission Chairmen by the Council's independent Chairman from recommendations of the Governors of the participating states. These would not be political appointments. We believe that greater state control of the Commissions will improve their performance. The Commissions should also serve as a forum for achieving federal consensus on issues effecting the region.

State Grant Program

The $5 million recision proposed for FY 1981 is disastrous. Some states already have grant awards based on the higher amounts. Commitments have been made and staff hired. Programs are underway. At stake is a 30 to 50% cutback in program effort while such problems as the current drought of nationwide impact dictates a need to expand our efforts more than four times over. Having said that, let me tell you why states do need federal matching grants for their water resources management, at least for another ten years. Water is so taken for granted by so many states -- including western states -- that management by the states is simply not funded at levels adequate to do the kind of planning and management which will assure that there is a supply in the future.

At this time, we are looking at a long, long road before we reach the point that states are financially able to take over the role which the federal government has played in water resources, even though the states need to do so. We must begin to set our sights toward that end. At this time, the planning grants administered by the Council should be broadened to include management opportunities and should be increased so that state capabilities, can fulfil the necessary state role advocated by the Administration. We must look to conservation, coordination of quality and quantity planning and groundwater and surface water conjunctive management, At one point, $50 million yearly was requested for this purpose, but it was cut and cut and now rescinded. Frankly, the states could match that amount. However, in this time of budget restraint, a minimum level would be $20 million for grants increased annually over the next ten years.

Funding

Approximately $14 million would be a minimum level for other activities of the reformed Water Resources Planning Act (P.L. 89-80) including Administrative costs, funding for river basin commissions and ongoing studies as well as the assessment of the Nation's water resources.

Research and Technology:

A strong arm to the Nation's wealth in knowledge stems from research and technology and, if you please, the training, development and the provision for experience of our young graduates of colleges and universities in water and land related resource affairs.

While there are some unfriendly aspersions of the efforts of and the need for an Office of Water Resources Research and Technology within the Department of Interior, let me assure you that the need still exists. Recision of $11.8 million in 1981 funds and a zero budget in 1982 funds is frightening. Admitted, reforms in this effort are in order.

However, as a person who, through the years, has hired many college graduates having received training under this program, I must say we need more of them, not less. Estimates from the Environmental Protection Agency project a need for nearly 500 well-trained Hydro-Geologists in new positions nationwide. Unfortunately, there are not enough trained technical professionals in this science to meet the current day-to-day needs of the states. As a matter of fact, those being trained under current and past state-federal funding under Title III of P.L. 89-80 are "grabbed up" by consulting firms, industry and higher paying federal positions routinely. Such actions leave the states stripped of their most valuable and desperately needed employees.

Accordingly, I suggest that the federal inputs to state-federal water resource programs be viewed as a whole without prejudice, but with the solid conviction that the past and future economic base of America is vested in its land; its water; its people working in concert.

Mr. Chairman, thank you and the members of your committee for this opportunity to summarize the views of some 58 constituents of ICWP and, admittedly, those of myself as a dedicated engineer whose career has been spent for the betterment of the democratic dreams of all Americans.

NATIONAL NAVIGATION PROJECTS

STATEMENT OF MELVIN SHORE, SECOND VICE PRESIDENT, AMERICAN ASSOCIATION OF PORT AUTHORITIES

Senator KASTEN. The next witness is Mr. Melvin Shore, the American Association of Port Authorities.

Mr. SHORE. Thank you, Mr. Chairman. My name is Melvin Shore, director of the Port of Sacramento, and I appear before you today as the second vice president of the American Association of Port Authorities. I would like to introduce Ms. Penny Goddin, a member of the Washington, D.C., staff of AAPA.

Senator KASTEN. Would she like to join you at the witness table?

Mr. SHORE. I think I just wanted to introduce her.

Senator KASTEN. Thank you.

HISTORICAL PERSPECTIVE

Mr. SHORE. We are here on behalf of AAPA to support the fiscal 1982 Corps budget. The American Association of Port Authorities was founded in 1912 and represents the Western Hemisphere ports and, in particular, the U.S. ports are represented here today by my testimony.

It is interesting to note that most of the major population centers of this country have grown up around ports. Ports also, of course, are a vital element in the national defense, both the channels and harbors and the landsite facilities.

It is important also to point out that the ports have grown up as a partnership between the Federal and local port authorities. This is historically based going back to the declaration of the Founding Fathers.

We believe that the Corps of Engineers has done an outstanding job and has done it extremely professionally including the work that they have been assigned by the Congress. Needless to say, the Corps' efforts have been undermined by the effects of inflation.

FUNDING REQUEST

At this particular time, AAPA is supporting President Reagan's request for $1.085 billion for Corps maintenance and operation activities. We also appreciate the fact that there is $39 million that was allowed to remain in the fiscal year 1982 supplemental budget.

In the proposal for fiscal 1982, we note a 15-percent cut in construction, general funds for fiscal 1982.

However, we also note a commitment that completion dates of navigation projects will not be affected. We certainly want to indicate that we hope so.

NON-FEDERAL INVESTMENT

The fact that the development of the port system of this country is a partnership is underscored by the fact that in 5 years—1973 to 1978—local ports have provided $1.68 billion of investment. Current cash value of the local investment represents $40.4 billion and replacement cost is estimated at $54 million. As we look to the Federal side, however, we find that the picture is considerably different.

For example, over the last 5 years there have been no new authorized projects. We must recognize that ships are becoming larger and channel and harbor work are necessary to keep up with the new technologies and the local investments that are already being made. Needless to say, failure to produce means impairment of our trade and the effects it has on the entire economy.

NATIONAL ECONOMIC BENEFITS

In 1977, the Maritime Administration made a study which pointed out that the ports are responsible for contributing $15 billion to U.S. gross national product, more than 1 million jobs are provided by the ports; personal income of $96 billion; business income of $3.7 billion; and Federal tax and customs revenues amounting to $5.2 billion.

Please note that the last is a direct income item for the Federal Government.

It is also necessary to point out that the ports serve the entire line of the United States, not just the question of the coastal States that are involved.

The people that are here from Iowa I think will recognize that their crops flow through the ports and these ports are providing facilities for this purpose.

In 1979, customs revenues of $5.3 billion compares with the Corps appropriation in 1980 for deep draft of $352 million. Please note the discrepancy between those figures. A considerable income to the Federal Government and a very small appropriation—I believe it is about 7 percent—that goes to the building of the Federal portion only of the deep-draft ports. We recognize the tightness of the funding situation this year and we hope that the committee will keep in mind that we are talking here about an investment.

We are not talking about an expenditure. We are talking about an investment that will earn revenues for the Federal Government, that will help with the balance of payments, will reap future benefits of increasing technology.

Current coal prices HAVE received a great deal of attention and the inability of the ports to handle the situation and, of course, the channels as well that are the responsibility of the Federal Government.

We believe that this shows the error of our ways on the part, particularly of the Federal Government in the past, in that the appropriations have been inadequate as authorizing mechanisms have not worked satisfactorily.

We hope that we will recognize the need so that coal and grain and many other cargos will use the ports with proper efficiency and keep the United States competitive in the world marketplace. Other countries are maintaining and deepening their ports.

We can do no less, we believe.

Mr. Chairman, you have my prepared statement. I thank you for the opportunity to appear before you today and will be happy to answer any questions.

PREPARED STATEMENT

Senator KASTEN. We thank you and your prepared statement, Mr. Shore, will be made a part of the permanent record.

[The statement follows:]

STATEMENT OF MELVIN SHORE, SECOND VICE PRESIDENT, AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. Chairman and members of the Subcommittee, my name is Melvin Shore. I am second vice president of the American Association of Port Authorities and port director of the Port of Sacramento. I want to thank the Committee for granting our request to present testimony today on the Fiscal Year 1982 budget of the U.S. Army Corps of Engineers.

For more than three centuries, America's seaports have been centers of population, trade, and economic growth. Through these ocean gateways moves the vast and infinitely varied commerce that is the life blood of modern civilization. To millions of immigrants, they have been havens of comfort, safety, and promise. Around them have sprung up a multitude of industries that depend on the proximity of ocean transport. In all the nation's wars, ports have been a vital if often overlooked element in our nation's defense strategy.

The modern U.S. deepwater port industry consists of 189 seaports located on the Atlantic, Pacific, and Gulf coasts, and on the Great Lakes. The American Association of Port Authorities, founded in 1912, represents public port agencies throughout the Western Hemisphere, including all the major seaports of the United States. The U.S. seaport function is derived from a partnership between local port authorities and the federal government. That partnership, forged through history and built upon declarations by the country's founding fathers, rests on the principal that harbors and navigation channels are the responsibility of the federal government and that the providing of shore-side cargo handling infrastructure is the responsibility of state and local government and the private sector. That partnership has given the United States the most modern port system in the world today, and that is the way we want to keep it.

National responsibility for the navigable waters of the United States can be traced back to the Northwest Ordinance of 1787 and to the formation of the federal government under the Constitution. Beginning with the Survey Act of 1824 and continuing to the present day, the U.S. Army Corps of Engineer has undertaken the federal task of harbor and navigation channel maintenance and improvement. It has done so professionally and with distinction, though in recent years, its efforts have been steadily undermined by inflationary pressures, with the result being that the Corps is able to do less and less with the available fiscal resources.

AAPA supports President Reagan's request for $1.085 billion for Corps' Operations and Maintenance. We also support the decision to leave the FY 1981 emergency supplemental of $39 million untouched. Had that not been done, that money might have been taken from the Operation and Maintenance allocation, thus further reducing the amount available for dredging. With regard to the proposed 15 percent cut in construction general funds for FY 1982, the Administration states: "About 75 of the more than 300 remaining projects would be delayed slightly. However, these delays would not affect the completion dates for hydro-power, municipal and industrial water supply, urban flood control or navigation projects." We hope that this commitment will be retained. The reality is that in actual dollars the

Corps' budgetary allocations to deepwater navigation projects have been declining in recent years.

America's seaport system, as I have said, is based on a partnership between the federal government and the states. Local port authorities, true to their responsibilities, have invested billions of dollars in new and improved cargo handling facilities. For the five year period 1973-1978 alone, that amounted to $1.68 billion. The cash value of the U.S. seaport marine totals is estimated to be $40.4 billion and replacement value at approximately $54 billion. That is what we have done, but our federal partner, of late, has not been shouldering its share of the burden. Not a single new deep-draft navigation project has been authorized since 1976. The facts are that U.S. waterborne commerce is expanding, ships are becoming larger and technologically much more sophisticated than their forebears of two decades ago, and demands on our seaports have been growing proportionately. The economy of the United States is as dependent as ever on the flow of foreign trade. These pressures are certain to mount in the years ahead, and unless the U.S. port industry is prepared, America's foreign commerce and, yes, the national economy, are sure to suffer.

America's ports are a national asset, from which the federal government derives very substantial economic, social, and national security benefits. Data developed by the U.S. Maritime Administration indicates that in 1977, for example, the U.S. port industry was responsible for:

--Gross sales within the economy of $28 billion;

--A $15 billion contribution to U.S. gross national product;

--1,046,800 jobs;

--Personal income of $96 billion;

--Business income of $3.7 billion;

--Federal tax and customs revenue amounting to $5.2 billion; and

--State and local taxes totaling $2 billion.

Foreign commerce is crucial to the U.S. economy. Most of the tonnage in U.S. foreign trade is carried by ship and is therefore dependent on ports. In 1978, foreign waterborne commerce passing through U.S. seaports amounted to 903.2 million tons valued at $197.9. That is in addition to the very substantial tonnages handled in our Great Lakes and domestic ocean trades. Ports serve the commercial, fishing, and defense needs of the entire nation, and not merely those of the states and communities where they happen to be located. Corn raised on Nebraska farms, for example, is shipped thousands of miles for export through our West Coast ports. Coal exported through Hampton Roads comes from mines located in Virginia, West Virginia, Kentucky and elsewhere. Vast quantities of petroleum and thousands of other commodities enter the port of New York for delivery to customers spread throughout the United States. The port of Charleston services a hinterland covering more than 20 states.

The nation's security also depends very much on our ports. Major naval installations are located at the ports of Portsmouth, New London, Philadelphia, Norfolk, Charleston, Jacksonville, San Diego, Long Beach, San Francisco, Bremerton, Pearl Harbor, and elsewhere. San Diego, CA, and Morehead City, NC are embarkation points for the U.S. Marine Corps. Warships and other vessels controlled by the U.S. government share the same channels provided under local sponsorship for commercial shipping at no additional cost to the Department of Defense. In time of war or declared national emergency, ports can be required to give the Armed Forces priority use for the loading of military equipment and personrel. As America develops its Rapid Deployment Force, ports will become of even greater significance in defense planning.

More tangibly, ports are an extremely lucrative source of federal revenue. In 1979, for example, the U.S. government collected $5.3 billion in customs revenues at U.S. seaports. By contrast, the Corps' FY 1980 appropriation for deep-draft navigation projects amounted to just $352.2 million. Port operators, moreover, are required to furnish the Customs Service with office facilities at minimal or no costs. These customs revenues are in addition to the billions of dollars in income taxes generated by port activities.

The facts are that without deep-draft navigation channels our ports simply cannot function. The funding problem has been aggrevated by the growing intricacy of the permitting and project authorization process. Needed harbor improvements must run a gauntlet of federal agency obstructions and lawsuits from well-organized and well-financed environmental lobbies, with the result that essential improvements are delayed for years, delays that are extremely costly and economically counterproductive.

The problem is beginning to catch up with us. The severe congestion at our nation's coal ports, with dozens of ships awaiting their turn at the coal berths for weeks if not months at a time, has aroused national concern. The facts are that America's coal ports do not have the depth of water required to fully load the very large colliers that may be expected to enter the international coal trades during the next two decades. The American people are aware now that failure to modernize our ports, including the development and maintenance of deeper channels, could cost the American economy thousands of jobs and millions of dollars in lost oportunities.

Current analyses suggest that our present deep-draft channels cannot safely accommodate many of the large ships that use them today. Increasing numbers of large ships moving in and out of our ports will only heighten the risk of serious accidents unless navigation channels are suitably enlarged and otherwise improved.

Ports are critically dependent upon the sum of U.S. redging capabilities. For this reason, AAPA, during its 1980 nnual meeting, adopted a resolution which supports a modern and efficient minimum fleet of the Corps of Engineers.— With the prospects for substantial Fiscal Year 1982 budget cuts, we acknowledge that the construction of new Corps dredges is an issue of questionable priority. However, AAPA relies on the judgment of the Corps of Engineers in its statement of need for such equipment. The U.S. port industry also recognizes the importance of the private dredging industry and its expanding capabilities.

The coal crisis has created new national awareness of the problems our ports have been facing for years. The situation confirms that if U.S. foreign commerce is to expand--as indeed it must--needed facilities, including deeper and regularly maintained navigation channels, must be provided. The port authorities and private industry have repeatedly demonstrated a determination to meet their responsibilities. It is time that the federal government in fulfilling its historic responsibility did the same.

PREPARED STATEMENT OF SENATOR DANFORTH

Senator KASTEN. Before we proceed with the Missouri witnesses, I want to include in the record the statement of Senator Danforth. I understand that because of other commitments he will be unable to be here.

So, without objection, his statement will be made part of the hearing record.

[The statement follows:]

STATEMENT OF SENATOR JOHN C. DANFORTH

Mr. Chairman, I was pleased to see that President Reagan's austere budget for fiscal year 1982 includes $87 million to permit construction to continue at full speed on the replacement of locks and dam 26.

I believe that this project is essential to the agricultural and industrial growth of the entire country. All agricultural products, coal and oil, fertilizer, and other raw materials and manufactured products transported by water between the Ohio River, lower Mississippi River and Gulf Intracoastal Waterway, and upper Mississippi and the Illinois Rivers must pass through locks and dam 26.

The current structure is obsolete, unsafe, and incapable of handling current traffic volumes, let alone the increases which are projected for the future. A serious bottleneck exists there already, causing delays to river traffic and adding to the costs of goods being transported. Prompt completion of a replacement lock, along with an auxiliary lock still to be authorized, is vital to the smooth flow of commerce along our Nation's waterways. I strongly urge your support for the full amount budgeted for locks and dam 26 in fiscal year 1982.

MISSOURI RIVER BASIN PROJECTS

STATEMENT OF RAY KIRK, PRESIDENT, MO-ARK ASSOCIATION

Senator KASTEN. Now, I understand Mr. Ray Kirk is to speak and coordinate the presentation on behalf of the Mo-Ark Association. And is Mr. McPherson with you?

Mr. KIRK. Yes, he is.

Mr. Chairman, our group is appearing on behalf of the 19 projects in our area. We have submitted a list of amounts. We would like to have it included in the record.

Several more members of our group will testify on the specific projects. We believe it would be worthwhile and a sound investment in the future. At this time, I would like to have Mr. John Gill of Kansas City, Mo., present a more specific statement on the budget restraints.

STATEMENT OF JOHN GILL, KANSAS CITY, MO.

Mr. GILL. Thank you, Mr. Chairman.

The Mo-Ark Association has, since 1952, been a strong voice for the water projects within the Missouri and Arkansas River basins, as well as the tributaries. Since the adoption of the Pick-Sloan plan in 1944, much work has been completed in the scope of this plan. This work includes construction of many reservoirs, levees, and other shed projects as well as work to help make the Midwest rivers navigable. Most of these projects have been completed at a time when the U.S. economy is flourishing and under control, but now our economy is not as healthy as it once was.

IMPACT OF INFLATION

Inflation has totally changed all our lives and how we do business. President Reagan has taken steps to control inflation and one of these steps is to cut projects and social programs to help balance the Federal budget.

The Mo-Ark Association agrees that the inflation is the largest problem we have to deal with at this time and steps taken to control it are supported by the Mo-Ark Association.

Many Government programs, of course, are being cut or eliminated to fight inflation but the Mo-Ark Association feels, however, that water projects should be treated differently because reservoirs and levees are projects where Government dollars are invested in capital improvements in our country, not money donated away to Government charity programs.

These water projects do help local economies in the construction, but they also benefit the entire Nation in the form of tax dollars and other benefits. Many of these projects are proven to pay for themselves, plus interest, in the form of tax dollars and will continue this return on investment. Other benefits include recreation and increased crop production which is vital to the world's food supply and has contributed to the solution of the balance-of-payments problem.

At this time, many small communities in the Missouri-Kansas area are running short of water due to the recent drought. Water resource projects can help alleviate that problem.

Also, it is a recognized fact among farmers in bottom-land areas where Government levees have been built in the Pick-Sloan plan that there has been a significant increase in the numbers and quality of water. While the Mo-Ark Association sympathizes with the Appropriations Committees and the budget proposals, we also feel water projects are very important to all Americans and we appreciate your consideration and support now and in the future.

Thank you.

Senator KASTEN. Thank you, Mr. Gill.

HILLSDALE LAKE, KANS.

STATEMENT OF JAMES HART, GARDNER, KANS.

Mr. KIRK. At this time, I would like to call Mr. James C. Hart, Gardner, Kans., on the Hillsdale Lake project.

Senator KASTEN. Mr. Hart?

Mr. HART. Good morning.

It is an honor to appear here before this committee to speak in support of the projects that have been recommended by the Mo-Ark organization.

Later on there will be a witness bringing some information as to the savings and investment Government has made in the levee and water conservation. I am here this morning representing the group from the Hillsdale Lake Area Development Association. The lake and reservoir are presently about 80 percent complete in the fiscal 1982 budget.

We find that the present administration didn't change the allocation of the request of the previous administration. They both left it in and the Mo-Ark supports that.

It will complete a project that we have waited so long for water supply. The area that has more or less put all of the eggs in one basket waiting for the Hillsdale Lake to be developed represents about 5 local water districts, rural water districts, and something like 8 or 10 municipalities, some of them small.

But they still have people and they still need water. We are going into, and probably hopefully end, about the third year of summertime drought. We hardly have enough water to take a bath and for the other needs.

Hopefully, looking down the road, we can see this reservoir complete. The water impoundment starting in September and we can follow it to having an ample supply of water, which will produce roughly about 17 million gallons a day for the next 100 years according to the Corps.

I am here in support of that and support of the other projects that the Mo-Ark has recommended and I appreciate this opportunity to appear before you, Mr. Chairman.

Senator KASTEN. Mr. Hart, we appreciate your being here this morning and your interest. The information that you have provided to the subcommittee will be most helpful. Thank you very much.

Mr. HART. This makes my 23d time I have been in Washington on this project.

Senator KASTEN. That is 23 more years than I have been here.

[The statement follows:]

RECOMMENDATIONS FOR APPROPRIATIONS, KANSAS AND MISSOURI WATER RESOURCES PROJECTS, FY 1982 BY THE MO-ARK ASSOCIATIONS

PRESENTED TO THE ENERGY AND WATER RESOURCES SUBCOMMITTEE ON APPROPRIATIONS OF THE U.S. SENATE AND THE HOUSE OF REPRESENTATIVES

Washington, D. C. - March 30, 1981

CORPS OF ENGINEERS PROJECTS
(Kansas City District)

	Carter's Recomm. Budget FY-1982	Reagan's Recomm. Budget FY-1982	Requests by Mo-Ark Assoc. FY-192
KANSAS RIVER BASIN			
Clinton Lake	1,192,000c	1,192,000c	1,192,000c
Kansas & Osage Rivers	1,070,000gi	1,070,000gi	1,070,000gi
MARAIS DES CYGNES-OSAGE RIVER BASIN			
Hillsdale Lake	2,864,000c	2,864,000c	2,864,000c
Harry S. Truman Dam & Reservoir	19,700,000c	14,500,000c	20,700,000c
Fort Scott Lake	-0-	-0-	-0-
MISSOURI RIVER BASIN			
Mo. River Levee System	3,500,000c	3,500,000c	3,500,000c
Mo. River Navigation	8,546,000o&M	8,546,000o&m	10,546,000o&m
Little Blue River Channel	5,100,000c	5,100,000c	5,100,000c
Little Blue River Lakes	38,000,000c	36,500,000c	38,000,000c
Blue River Channel	4,400,000c	4,400,000c	4,400,000c
Long Branch Lake	500,000c	500,000c	500,000c
Smithville Lake	2,963,000c	2,963,000c	2,963,000c
Lower Grand River (levee)	-0-	-0-	150,000p
Rathbun Lake	835,000o&m	835,000o&m	2,145,000o&m
Platte River Missouri	-0-	-0-	70,000p
ARKANSAS RIVER BASIN			
El Dorado Lake	2,600,000c	2,600,000c	4,100,000c
Access Road	-0-	-0-	50,000gi
Halstead Local Protection	200,000gi	200,000gi	275,000gi
Pearson-Skubitz (Big Hill Lake)	2,913,000c	2,913,000c	2,913,000c

STATEMENT OF WINSTON RASHLEIGH, CHAIRMAN, MISSOURI RIVER SHIPPERS COMMITTEE

Mr. KIRK. Mr. Winston Rashleigh, chairman of the Missouri River Shippers Committee.

Mr. RASHLEIGH. Good morning. As Ray indicated, I am chairman of the Missouri River Shippers and Operators Committee, a committee of Mo-Ark. The committee consists of shippers and terminal operators concerned with Missouri River navigation.

I also am secretary and treasurer of a producer of dehydrated alfalfa in the State of Nebraska.

In both of these capacities, I want to stress the importance of the appropriation of funds for the operation and maintenance of the Missouri River navigation projects.

Missouri River navigation provides a much-needed form of transportation for bulk commodities. Most of these commodities are in three agriculturally oriented groups, including grain, feed products, and agricultural chemicals.

During the past 10 years, between 16 and 17 percent of the farm products in the lower Missouri River basin was moved by barge.

Between 6 and 12 percent of the grain and feed products and between 17 and 22 percent of these were agricultural chemicals. The average distance of each movement was approximately 1,746 miles.

As you know, we are entering our third year of severe drought in the Missouri River basin. Our Shippers and Operators Committee has been told by the Missouri River Division Engineer of the Army Corps of Engineers that unless we receive significantly higher than normal rainfall, we face the prospects of entering a shorter navigation season or lower water levels.

Although the Corps has not dredged the Missouri River for several years, with the main stem reservoirs, low dredging will likely be necessary this year.

For these reasons, we urge this committee to favorably consider appropriating the moneys needed to maintain the Missouri navigation.

Barge transportation is the most fuel-efficient and economic method of bulk transportation of farm products.

This transportation mode will keep this level of performance if our waterways are adequately maintained unless, of course, disproportionate implementation of additional taxes, whether fuel use, segment, or other force a discontinuance of this means of moving bulk agricultural commodities from farm to market.

I would like to express my thanks to you for the opportunity to appear before this subcommittee and to present our views.

Senator KASTEN. We appreciate your testimony here this morning. We thank you very much for your interest and for your participation.

STATEMENT OF JOHN McKENZIE, EXECUTIVE VICE PRESIDENT, SCNO BARGE LINES, ST. LOUIS, MO.

Mr. KIRK. Mr. John McKenzie, executive vice president, SCNO Barge Lines, St. Louis, Mo.

Senator KASTEN. Mr. McKenzie.

Mr. McKENZIE. Mr. Chairman, the purpose of my statement is to let this subcommittee know that SCNO Barge Lines and the other navigators on the Missouri River are vitally concerned in these appropriation hearings and the ultimate recommendations concerning appropriations for the Missouri River system. We feel that the river transportation system on the Missouri River provides a definite economic benefit to the entire Missouri River basin and surrounding areas. This is especially true on agricultural products. The Missouri River operation, maintenance, and repair budget for fiscal year 1982 is approximately $8.5 million. As navigators, we are concerned that this money is used wisely in the best possible ways to benefit navigation.

We need and receive cooperation from the Corps of Engineers in the U.S. Coast Guard in maintaining the proper navigation channels and repair and maintenance of the Missouri River.

The tonnage shipped on the Missouri River in the 1979 season, which is the most recent season statistics are available, was 7,765,000 tons, which was an 18½-percent increase over 1978.

At the present time, there is additional capacity for handling more tonnage on the Missouri River and we would expect the steady growth in tonnage during the next 20 years.

In closing, I would like to again say that we feel that we provide a very definite economic benefit to the entire area serviced by the Missouri River.

We would not want to see any funds cut from the operation and maintenance budgets for the Missouri River in future years.

This Midwestern agricultural section of the United States is vital to satisfying the appetites of the entire world and the Missouri River is a definite asset in seeing that agricultural items produced in the Midwest are transported in the most economical way throughout the United States and for export shipment to foreign countries.

Mr. Chairman, thank you for the opportunity of addressing this committee.

Senator KASTEN. Mr. McKenzie, we very much appreciate your interest and your participation here this morning and we thank you for your participation.

CLINTON LAKE, KANS.

STATEMENT OF BUFORD WATSON, LAWRENCE, KANS.

Mr. KIRK. Mr. Buford Watson, Lawrence, Kans., Clinton Dam.

Senator KASTEN. Mr. Watson.

Mr. WATSON. Mr. Chairman, I wish to thank you this morning for this opportunity to speak to you. I am city manager of Lawrence, Kans., and speak in their behalf, as well as being a member of the Mo-Ark board of directors. I am also the selected spokesman for Douglas County and the Water Management Association.

Our basic purpose is to say, "Thank you." We dedicated our lake last July. We are now in operation and the city of Lawrence has spent $9 million on the water treatment plant. We are treating water for two small cities and three rural water districts in our county with the possibility of two other small towns coming in this year.

We are quite proud of Clinton Lake. We think it is a fine investment for our region and certainly it is helpful to us in the shortage of water that we know in Kansas. We also are very supportive of the regional programs that Mo-Ark has suggested and we think that the appropriations, specifically for Clinton Lake, will provide for the orderly completion of the service areas and the continued operation.

We wish to thank you and this committee for your consideration.

Senator KASTEN. Mr. Watson, we thank you for being here this morning. We thank you for your participation and your information.

SMITHVILLE LAKE, MO.

STATEMENT OF WILLARD PENCE, MAYOR, SMITHVILLE, MO.

Mr. KIRK. Mr. Willard Pence, mayor of Smithville, Mo., for Smithville Lake.

Mr. PENCE. I am representing 2,000 citizens from the city of Smithville and speaking to you once more on the Smithville Lake project. We have been coming to Washington D.C., for many years and are once more requesting construction funds in the amount of $2,960,000. This amount is in President Reagan's recommended budget and should about finish this project. We are told by the Corps of Engineers that we will be able to close the gates on the dam in 1982. This will give us the flood protection we need in Smithville. With the project complete, the Government will realize some payback on its investment.

I want to thank you very much for your continued support and consideration through the years and thank you on behalf of the citizens of Smithville. We are very grateful to you for this project.

Senator KASTEN. We thank you, Mayor Pence, for your participation and for your interest in this project.

[The statement follows:]

STATEMENT OF MAYOR WILLARD C. PENCE, SMITHVILLE, MO.

I am submitting this statement on behalf of the Smithville Board of Aldermen, the 2,000 citizens of Smithville, Mo., and myself. We have been making trips to Washington, D.C., for many years, speaking on behalf of the Smithville Reservoir. As you are aware, the project is nearly complete and only a few finishing touches are yet to be made.

The U.S. Corps of Engineers has requested construction funds in the amount of $2,963,000 and this figure is included in President Reagan's proposed fiscal year 1982 budget. As I understand, this amount would provide the necessary money to complete the project. Since it has been such a long time in coming, and since many of the economic gains of the project are predicated on its completion, I feel it is important and financially prudent that the project be completed as soon as possible. Therefore, I urge you to approve and designate in the public works appropriation bill for the 1982 fiscal year the $2,963,000 listed in the President's budget.

I thank you very much for your continued support and consideration.

LITTLE BLUE RIVER FLOOD CONTROL PROJECT

STATEMENT OF WILLARD BECKER, SECRETARY-TREASURER, ATHERTON LEVEE DISTRICT

Mr. KIRK. Bishop Willard Becker, RODS Church, city of Independence and Chamber of Commerce.

Mr. BECKER. I appreciate this opportunity, Mr. Chairman. I have filed written statements which will be for the committee.

I merely want to state, in order to conserve time this morning that the two projects which we are vitally concerned with, one, that of the Missouri River levee system and, two, the Little Blue Valley lakes and channel improvement program. These are both in the general appropriations recommendations and we appreciate the fact that they are there and hope that they will continue to be funded.

Thank you very much.

[The statement follows:]

STATEMENT OF WILLARD C. BECKER, SECRETARY-TREASURER, ATHERTON LEVEE DISTRICT

LITTLE BLUE RIVER LAKES AND CHANNEL IMPROVEMENTS

I appreciate the opportunity to submit a statement in support of appropriations for construction of the Little Blue River lakes and channel improvements. The Atherton levee system is located downstream from the flood control lakes of the Little Blue project. Each day there is delay in these projects the area protected by the Atherton levee (351-R) are in a precarious situation. The upper channel has been improved, permitting faster runoff of flood waters which prevents flooding in the upper areas, but until the control lakes are constructed, we in the lower area are subject to this excess water. The project, when completed, will be of tremendous worth to Jackson County.

I respectfully request apropriations of sufficient amounts to continue the rapid development of the projects of the Little Blue channel and lakes.

MISSOURI RIVER LEVEE SYSTEM

I also submit a statement in support of continuing appropriations for construction of the Missouri River levee system. Many years ago, this program was developed as part of the authorization of the Pick-Sloan plan. Each day we see a return on the investments which have been made. The many thousands of acres of valuable lands protected adds greatly to our Nation's economy and environment.

There are yet thousands of acres of lands unprotected from the ravages of flood waters. I respectfully request that this committee continue to appropriate funds for an orderly development of the Missour River levee system.

HEARING PROCEDURE

Senator KASTEN. Mr. Kirk, I must remind you that we have others that are scheduled to testify this morning. So, if you could ask remaining witnesses with you to summarize, as Commissioner Becker just has, it will make it possible for everyone else to be accommodated.

Mr. KIRK. We will eliminate some.

LITTLE BLUE RIVER PROJECT

Mr. Don Elefson, RLDS Church, city of Independence and Chamber of Commerce.

Mr. ELEFSON. Thank you. I am Don Elefson, I have been asked on behalf of Jackson County, which includes the area of Kansas City and other towns, to speak on their behalf and to make a record of the fact that they will support and do support the projects of Mo-Ark, but particularly the Little Blue River project which is a major part of their activities in the area. In addition, I have filed on behalf of the city of Independence, the city of Blue Springs, and the city of Lee's Summit. In addition, I have filed a statement in behalf of the chamber of commerce of Independence and on behalf of my boss, Mr. Hansen of the RLDS Church. The fact all these statements have been filed, I think, verifies the strong support that we have in our area for the Little Blue River project particularly, and we definitely want to lend our support for that. I would suggest to you that we are at a very critical point in construction phase of that. The channel work has been, by and large, completed. As a result of the increased capacity in the channels we are at a point with the construction of the reservoirs to control the flow into the channels and until these reservoirs have controls in effect we will have heavy floods.

We are very supportive of the recommended budget, and would like you to provide the full $38 million—we can live with and will support that figure. So we encourage your participation there. We feel we are at a very critical stage in our construction project.

Senator KASTEN. Thank you very much, Mr. Elison. We appreciate your testimony this morning.

[The statement follows:]

STATEMENT OF FRANCIS E. HANSEN, PRESIDING BISHOP, REORGANIZED CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS

Thank you for this opportunity to submit a statement in support of the plan of improvement for flood control and water resources for the Little Blue River in Jackson County, Mo.

We are very appreciative of the progress being made in resolving the flooding problems of the Little Blue River. We recognize, however, that we are now at a critical point in the construction phase. A major portion of the channel improvement has been completed. We are pleased with this accomplishment. However, flooding problems may be somewhat aggravated in certain areas until control of the flow of water into the channel has been completed, thus the critical need for the construction funds for the lake projects. We will hope for no unusual rainfalls during the interim.

The Corps of Engineers has indicated a capability for the 1982 fiscal year of $5,100,000 for construction of the lakes. The President's budget recommends the same amount for channel improvements and $36,500,000 for lake development. We would request consideration be given to the full capability of the Corps of Engineers. However, recognizing the need for budget adjustments, we would support the $36,500,000 as recommended in the President's budget, but strongly urge that this full amount be included.

STATEMENT OF SAM WILLIAMSON, EXECUTIVE VICE PRESIDENT, INDEPENDENCE (MO.) CHAMBER OF COMMERCE

The Chamber of Commerce of the city of Independence thank you for this opportunity to submit a statement in support of the funding of the Little Blue River flood control program.

We have observed with appreciation the progress of the project to date. We recognize it as a very important ingredient in the stability of our community. We realize the status of the present program to be at a critical point in its progress and that there is an urgent need for an early completion of the lake portion.

We respectfully request that the funds be provided to the full capability of the Corps of Engineers for both the channel improvements and the lake construction.

Statement of Gene H. Rhodes, Mayor, Lee's Summit, Mo.

The City of Lee's Summit expresses our appreciation for this opportunity to file a statement in support of the flood control program of the Little Blue River.

We feel the project as it is now being developed will have a very positive effect on our community. The control of flooding as well as the availability of the Longview Lake for recreational purposes is important to us.

We respectively request that funding to the capability of the Corps of Engineers be included in the budget of the 1982 fiscal year.

Letter From Thomas E. Woods, Mayor, Blue Springs, Mo.

March 24, 1981

Public Works Subcommittee
on Appropriations
Of The United States Senate
and The United States House
of Representatives

Honorable Committee Members:

On behalf of the City of Blue Springs, Missouri Board of Aldermen, I submit this letter of endorsement in full support of the funding for the Little Blue River Lakes Project. Our City officials feel that this project is vital to the economic and industrial development of this area. We respectfully request the Committee's favorable consideration of the appropriations that are needed in the fiscal year 1982 for this much-needed project.

Very truly yours,
CITY OF BLUE SPRINGS

Thomas E. Woods

Thomas E. Woods
Mayor

Statement of E. Lee Comer, Jr., Mayor, Independence, Mo.

The City of Independence continues to be vitally interested in the ongoing channel improvement and flood control work on the Little Blue River in Jackson County, Missouri.

Virtually all of the undeveloped land within the corporate limits of the City of Independence which is suitable for industry lies within the flood plane of the Little Blue River, and I respectfully request that funding for channel improvements and flood control be considered and continued to the Corps of Engineers capabilities.

Your favorable consideration for the continuation of these projects in the most expeditious manner is earnestly solicited.

Letter From Dale Aumgardner, County Executive, Jackson County, Mo.

March 27, 1981

Mr. Don Elefson
RLDS Auditorium
Farm Dept. #202
Box 1057
Independence, Missouri 64050

Dear Don;

I will be unable to make the trip to Washington with MO-ARK.

You are very familiar with the needs of Jackson County. I would appreciate it if you would speak to the Committee on behalf of Jackson County in support of this project.

Thank you very much.

Sincerely,

Dale

Dale aumgardner
County Executive

HARRY S. TRUMAN DAM AND RESERVOIR, MO.

STATEMENT OF GLEN TOALSON, OSCEOLA, MO.

Mr. KIRK. Mr. Glen Toalson, Truman Dam and Reservoir.

Mr. TOALSON. Good morning. I filed a statement from the Osage-Sac Association of Mo-Ark and from the Osceola City Chamber of Commerce, and also the town of Roscoe.

On behalf of the citizens, we express appreciation for everything that this committee has done in the past. We appreciate the funding in the past. We understand that you have a very tough job ahead of you and we are supportive of your efforts. Today is my 21st appearance in Washington in support of the water projects. I feel it puts us in the same ball park as this subcommittee insofar as the water resources are concerned but we are all dedicated to water. I am fully aware that cuts have to be made. However, the $4.7 million cut with respect to recreation, I really feel it is not justified. I am not saying or implying that Harry Truman project is a sacred cow. However, it is a half a billion dollar project that is on the brink of completion and this cut will make the public use and recreation area unusable.

Normally recreation is not a necessity. However, this cut, the cut is into the very heart of the people who have suffered the most in the last 15 years. I have reference to the citizens of our county and my city in particular. The Government took over a third—25 percent of the homes, 10 percent of the businesses, and thousands of acres of farmland. We have lost all agricultural-related industries. Last year we had three grocery stores; today we have one. We had a store since 1902 which closed its doors. We have several others on the way to be wiped out. Government acquisition of farms and businesses and homes that is related to this division is within our city. There is only one route of recovery; that is, the new industry to us. To capture this industry the nearby public user areas must be completed and until they are completed, no businesses related to tourism and recreation will come in and develop. So to accomplish this we feel it is imperative that you people restore the budget of $4.7 million so that these areas can be completed in the fiscal year 1982. Not only would we save, but you would also be receiving considerable benefits to the U.S. Treasury by this. We are all looking at the same bottom line. To me, Osceola is the capital and I feel one way it might help this is the Missouri River mitigation plan the Fish and Wildlife people are fostering. They want the Missouri River to be reverted to the way it was before Lewis and Clark even found it and people are the endangered species, not the fish and the birds. So we hope that you will treat our problem as a capital investment and, again, we are most appreciative.

Thank you.

Senator KASTEN. Thank you, Mr. Toalson.

[The statements follow:]

STATEMENT OF MAXINE KIEFER, DIRECTOR, OSCEOLA (MO.) AREA CHAMBER OF COMMERCE

As a Director of the Osceola Area Chamber of Commerce and on behalf of the merchants of our area, I want to express our appreciation for your past support of the Harry S. Truman Dam and Reservoir Project.

Our area depends heavily upon tourism and recreational trade since we have no other industry. The Truman Reservoir has opened the door to our area in the form of improved roads and highways, improved city facilities, new park and recreational areas. We would like very much to see the project completed at the earliest possible date in order that the economy of our area might improve.

Many of our businesses are not expanding and private investors are not going into new businesses until the Truman Reservoir Project is finished. During this "wait and see" period, our little city is experiencing a depressed economy. After seventeen (17) years of waiting, it is urgent that we see the completion of this Project.

We urge you to restore the original appropriation funding for this important project. Any cut will only add further delays and, in turn, affect present businesses and possibly halt the opening of any new development or business.

Please consider this letter as the voice of our Merchants and Citizens of our area.

Thank you for listening. Any consideration given will be appreciated.

STATEMENT OF GLEN F. TOALSON, CHAIRMAN, OSAGE-SAC ASSOCIATION OF MO-ARK, AND MEMBER, EXECUTIVE COMMITTEE, MO-ARK ASSOCIATION

On behalf of the Citizens of the Osceola area, I wish to express our appreciation for your courtesy and consideration extended us today and on previous occasions. Today marks my 21st appearance in support of water resources.

Our country is the leader of the free world and to maintain this position of leadership, we must have ample energy. The answer to energy is water — water to generate hydro-electric power; to cool thermal and nuclear power plants; to proceed with coal gasification. Although we have enough water at this time, we cannot be sure we will have it in years to come.

A 1974 study by the University of Missouri at Rolla has concluded that by the year 2000 there will probably not be enough water to meet the needs of all users. For many years, Federal Agencies, in cooperation with local governments, have been planning for the future. We must continue to plan so these resources will be further enhanced. Our children, grandchildren, and great grandchildren can only receive benefits based on what we do today. The presently unsolved energy crisis, if coupled with a shortage of water over a large area would be catastrophic.

Our project will supply a dependable source of water to meet future domestic and industrial needs; provide down stream flood protection; will generate nearly 300 million KWH of pollution-free energy a year; will provide recreation; and fish and wildlife conservation. She will pay for herself in a very short time. Harry S. Truman Dam is nearly completed and with funding to the Corps full capability, we can hasten this completion.

Since our area has lost many thousand acres of farm land, it has also lost many businesses related to agriculture. Therefore, it is imperative that you restore to the budget the 4.7 million dollar cut, thereby providing the necessary funds to complete the public use areas and recreational facilities on schedule. Only then will businesses related to tourism and recreation locate in our area. These new businesses will help restore our tax base and will also contribute considerable tax revenue to the U. S. Treasury.

Gentlemen, all of us are looking at the same "bottom line", and Osceola has been suffering since 1967.
Thank you again for your consideration and courtesy.

STATEMENT OF MABEL GIST, MEMBER, BOARD OF DIRECTORS, MO-ARK ASSOCIATION

On behalf of the citizens of Roscoe, Missouri, a small town on the upper Osage arm of the Harry S. Truman Lake, I urge that your Committee give favorable consideration to the allocation of funds for a recreational facility at Roscoe in the budget for Fiscal Year 1982.

The project proposed to the Committee, and that has been proposed to the Corps of Engineers since 1978, is the construction of a Public Recreation Area at Roscoe, specifically, a campground; with necessary funding to be allocated to the Corps of Engineers.

The Roscoe access is the last access point on the Osage arm of the Harry S. Truman Lake, with the nearest overnight facility on the Lake 15 river miles away. Experience has proved the need for a camping facility is here - last summer campers and recreational vehicles were parked on side streets and at the edge of the Lake.

The proposed overnight camping facility would include seven (7) camp rings, approved water and sewage systems, electrical hook-ups, and park roads. The estimated cost to complete this projects, and the amount that we are asking to be allocated, is $37,500.00.

The original Master Plan prepared by the Corps of Engineers for the Lake shows the Roscoe area to have future intensive recreational use. The citizens of the town have proposed the facility each year since 1978. Roscoe is a village that needs assistance in its efforts to cope with the influx of visitors. I urge your support of this request for the Budget of Fiscal Year 1982.

FISCAL YEAR 1982 BUDGET PROCESS

Senator KASTEN. I am a member of the Budget Committee and one of the things that we have been trying to do is restore funding levels for certain programs or try to work out ways that within the same pot of money there could be a redistribution. I wouldn't want you to answer this question at this time, but possibly by working with Mr. Kirk and other representatives of this group, you as a group might come up with the proposal which would restore some of the funds for the Harry S. Truman Dam and Reservoir project and cut back slightly on some of the other ones, delay everybody a little more, maybe you could have $3 or $4 million of your $5 million that you want. That is basically what we have been doing in the Budget Committee. What we are saying is, we are leaving it to you to solve these problems and recognize, as you do, that money is taken from one spot and put into another. That is the juggling act that we are working on every single minute in the Budget Committee. As I look at the projects, almost every single one is being funded at roughly the level we got the Blue River lakes part of it; it is a little bit lower but, basically speaking, you as a group are coming out a whole lot better than any other single group we have been working with in Budget. You are all aware of that.

Basically, the cuts are about 20 percent across the board. It is a recognition of the fact that the Congress supports your efforts, but I think it might be time well spent if you sat down together and tried to work out a way to take a few of these dollars and move them around. I am not sure it would be possible, but it might be something you could consider.

Mr. TOALSON. We would be most happy to cooperate in any way, answering questions you have in writing or what have you.

HARRY S. TRUMAN DAM AND RESERVOIR, MO.

STATEMENT OF T. D. FLEMING, PRESIDENT, UPPER OSAGE-SOUTH GRAND ASSOCIATION

Mr. KIRK. Mr. T. D. Fleming, president of Upper Osage-South Grand Association, Harry S. Truman Dam, Clinton, Mo.

Mr. FLEMING. Thank you. It is pretty easy to summarize when you are not one of those in the budget cuts. It is a little harder when you are. I am president of the Upper Osage-South Grand Association and this is an organization that represents about a seven-county area, businesses and agri-businesses in the Harry S. Truman Dam and Reservoir area. We do appreciate your allowing us to appear and we know you are on a time schedule and we will attempt to be brief.

Over the past 16 years, the Harry S. Truman Dam and Reservoir has been a continuing dream at a time when the responsibility has been handed from businessmen to businessmen, some living and some have died, but not the dream.

What started as a great conservation and flood control project and still is, with realistic cost benefits, has added hydroelectric power, power that has become a premium in today's marketplace, to replace OPEC oil. But 1981 budget reallocation has caused us to feel the impact of recreation on the marketplace and, as Mr. Toalson has so vividly pointed out, it is a potentially economic opportunity that outstrips many water projects that are originally laced with benefits and provided a financial boost to an area in an infinite variety of ways, thus enriching the original benefit for which the project was first perceived.

The Truman Dam and Reservoir is a triple threat. It provides flood control as originally intended; it will generate six hydroelectric power generators which have a capacity of approximately 280 million kilowatt-hours; and it will enhance the lives of millions through recreation facilities and public use areas.

The Truman Lake project has survived those who call themselves environmentalists, court action by less than informed attorney general staffs, and a war where money was diverted from many public use and public work projects, stretchouts, outright delays, and political probes and problems even in engineering and correctable errors.

Now we face a real dilemma. We do not wish this dream to turn to a nightmare. The lake, all of its 55,000 acres, is now a reality. Power from one generator should be operational by fall and the downstream problems which have been so apparent in the news and so important to those who live in the area have been resolved to their apparent satisfaction and to the satisfaction of the politicians. But we have one glaring problem. We have virtually no public use areas completed; and the projection of 1 million visitors in 1981 and perhaps 3 to 5 million in 1985.

The approximate $5 million cut from the Harry S. Truman project does not appear in our opinion to be a good sound business decision. In review of the entire Kansas City area, Corps of Engineers' projects, it is the only public works project so severely cut. The projected return in income from the completion of these public use areas would be many times the number of dollars spent and would be recaptured quickly after completion date. Also consider the tremendous impact in conservation of energy, the fuel costs which could be saved because of its proximity to two of the largest metropolitan cities in the State. Many of its current population are now traveling greater distances for the same facilities.

It is very dramatic when you realize with the medium-sized American-made automobile you can get to Truman and back on one tank of gasoline from almost anywhere in the State of Missouri. This makes the project relatively affordable to a vast number of not only Missourians, but Midwesterners.

Our association is in harmony with those to slow down inflation, but we feel this project—it has historically taken its lumps in budget cuts—needs final completion and the continued delay would contribute to inflationary costs.

Although the $5 million is not large by some budget standards, it is by ours. It represents 25 percent of the original 1981 budget recommendation and over 50 percent of the money to be allocated for public use areas. A project this near completion, ready to deliver the supply side of economics in bringing a return on Government expenditures, we feel should not be delayed. We plead with you to reconsider the recommended budget of 1982 and restore the entire Corps capability of $20.7 million. The job needs to be finished. And the American public deserves a return on its previous investment of almost a half million dollars.

I thank you again for the kind consideration.

Senator KASTEN. Thank you. Again, Mr. Kirk, I want to remind you that we have a problem with time. It is not a problem that I can do anything about. There are no other members here. I am scheduled to be in another meeting having to do with Defense appropriations at 11 o'clock. I have already told them I am going to be late. What we are doing is being unfair to the other people waiting to testify, so I would ask that you do the best you can in terms of condensing the statements. Also, I would ask that only one spokesman speak on a given project because all of this information will be put in the hearing record.

CLARENCE CANNON DAM AND RESERVOIR, MO.

STATEMENT OF W. H. MEYER, EXECUTIVE SECRETARY, MARK TWAIN LAKE AND CANNON DAM AREA DEVELOPMENT ASSOCIATION

Mr. KIRK. We appreciate your problem. We will be out of here shortly. Mr. W. E. Meyers, Monroe City, Mo., on the Clarence Cannon Dam and Reservoir.

Mr. MEYERS. Thank you. I am executive secretary of the Cannon Dam Association in northeastern Missouri. I have filed written statements with your staff.

Our project is 90-percent complete and a little more than a year of the final touches on the dam and powerplant will make it complete. We just want to thank you for this opportunity and for your past support for many years. Thank you, sir.

Senator KASTEN. Thank you, Mr. Meyers, for your personal testimony here this morning. And thank you for summarizing your statement.

[The statement follows:]

STATEMENT OF WARREN G. SEE, PRESIDENT, MARK TWAIN LAKE AND CANNON DAM AREA DEVELOPMENT ASSOCIATION

The Mark Twain Lake and Cannon Dam Area Development Association, the citizens group which exists for the purpose of representing the interests and concerns of people in northeast Missouri, west-central Illinois, and southeast Iowa, is honored and privileged to submit testimony to your committee relative to the Clarence Cannon Dam and Reservoir now nearing completion on Salt River in Monroe and Ralls Counties, Mo.

We earnestly request your support for adequate funds to insure the completion of this most important and vital project for our area. The Presidential budget for fiscal year 1982 carries $12.1 million for construction and $3.1 million for operation and maintenance.

We urge your consideration in funding these full amounts for the following reasons:

One. To date, $233,637,000 has been spent on this project and it is 90 percent complete. Any delay in funding the final stages of construction would only cause deterioration in the part already completed and, hence, mean additional funds would be needed.

Two. Hydroelectric power is needed to meet the demands within the area and would assist in curtailing ever-rising utility costs by providing an economical source of power. This project will generate 62,000 Kva power which will help to alleviate power supply problems. At the present time, powerhouse work is 73 percent complete.

Three. Good, clean water reserves are needed to provide the area with a high-quality freshwater supply. This area, like many areas throughout the United States, is experiencing a severe drought forcing several water districts to curtail further expansion due to low water supplies. When this lake is filled, it will give a much needed source of water to communities and rural residents throughout the area by providing a reserve of 20,000 acre-feet which will help provide the high-quality freshwater supply needed.

Continued full funding without delay for an early completion date, we believe, is of utmost importance. We, therefore, urge you to continue your excellent support of this project as you have in the past so that it may be completed as scheduled and at a time when its benefits will be of inestimable value.

We are most grateful for your past support and for giving us the opportunity to appear before you today.

Mr. KIRK. Lew Paramore, executive vice president of Mo-Ark Association.

Mr. PARAMORE. Senator, I have been asked by Water Commissioner Jack Alexander to speak with his permission. He planned to attend but couldn't at the last minute. Can he file a written statement and how soon does he have to have that?

Senator KASTEN. The record will remain open until April 10 to receive additional statements.

Mr. PARAMORE. Thank you. The only other thing I want to leave with the committee is the track record of the Corps of Engineers project constructed in the Kansas City district which comprises the majority of Missouri and Kansas. It shows $1 billion in cost has returned benefits from flood control of approximately $3 billion. So, they are indeed capital investment. I would like to leave it for the Committee.

[The statement follows:]

Estimated Project Costs & Benefits thru FY 1979 (in $1,000)

Project Name	Project Costs			O & M Costs			Benefits	
	Total Costs	Federal	Non-Federal	Total O & M	Federal	Non-Federal	Recreation	Flood Control
Summary								
Lakes	$ 976,374	$ 976,374	$ 0	$ 71,434	71,434	$ 0	$ 172,988	$ 614,258
Mo. R. Levee System	34,550	31,390	3,160	1,037	0	1,037	None	50,864
Local Protection	125,643	102,748	22,895	11,554	0	11,554	None	2,238,086
Total	$ 1,136,567	$ 1,110,512	$ 26,055	$ 84,025	$ 71,434	$ 12,591	$ 172,988	$ 2,903,208

These tables contain costs & benefits attributable to Corps projects in the Kansas City District

Flood control benefits not included above: (in $1,000)

Upper Mo. R. Lakes - $ 1,015,390
Dept. of Interior Lakes 30,480

Estimated Project Costs & Benefits thru FY 1979 (in $1,000)

Project Name	Project Costs			O & M Costs			Benefits	
	Total Costs	Federal	Non-Federal	Total O & M	Federal	Non-Federal	Recreation	Flood Control
Harlan Co. Lake	$ 47,705	47,705	0	$ 8,725	$ 8,725	0	$ 18,355	$ 13,381
Milford Lake	49,143	49,143	0	6,395	6,395	0	18,154	83,616
Wilson Lake	20,109	20,109	0	5,026	5,026	0	7,242	4,402
Kanopolis Lake	12,538	12,538	0	5,994	5,994	0	13,775	30,990
Tuttle Creek Lake	80,377	80,377	0	7,813	7,813	0	20,407	296,850
Perry Lake	49,040	49,040	0	5,472	5,472	0	17,172	132,959
Clinton Lake *	53,178	53,178	0	333	333	0	470	979
Smithville Lake *	69,624	69,624	0	208	208	0	979	6,354
Long Branch Lake *	16,597	16,597	0	122	122	0	128	12
Rathbun Lake	27,127	27,127	0	5,341	5,341	0	13,667	11,819
Melvern Lake	37,410	37,410	0	3,658	3,658	0	4,697	12,191
Pomona Lake	13,997	13,997	0	6,197	6,197	0	14,614	16,766
Stockton Lake	76,507	76,507	0	8,179	8,179	0	14,397	7,982
Pomme de Terre Lake	17,097	17,097	0	7,092	7,092	0	28,765	1,863
Harry S. Truman Dam & Res. *	405,925	405,925	0	679	679	0	166	71
Total Lakes	$ 976,374	$ 976,374	0	$ 71,434	$ 71,434	0	$ 172,988	$ 614,258

* Under construction status.

	Estimated Project Costs & Benefits thru FY 1979 (in $1,000)							
	Project Costs			O & M Costs			Benefits	
Project Name	Total Costs	Federal	Non-Federal	Total O & M	Federal	Non-Federal	Recreation	Flood Control
Mo. R. Levee System								
R 513-512	$ 2,223	$ 1,939	$ 284	$ 96	0	96	None	$ 4,127
R 500	439	408	31	93	0	93	"	855
L 497	1,926	1,734	192	62	0	62	"	3,296
L 488	1,553	1,497	56	104	0	104	"	4,916
R 482	1,170	1,081	89	100	0	100	"	2,657
L 476	1,617	1,520	97	104	0	104	"	3,228
R 471-460	3,915	3,482	433	40	0	40	"	4,790
L 455	4,742	4,270	472	51	0	51	"	4,466
L 448-443	2,920	2,740	180	104	0	104	"	11,625
R 440	1,652	1,567	85	100	0	100	"	3,286
L 408	6,403	5,683	720	26	0	26	"	2,828
L 400	1,183	1,073	110	79	0	79	"	2,696
R 351	3,521	3,222	299	48	0	48	"	2,092
Kimsey-Holly	1,286	1,174	112	30	0	30	"	No Record
Total Mo. R. Levees	$ 34,550	$ 31,390	$ 3,160	$ 1,037	0	$ 1,037	None	$ 50,864

Project Name	Estimated Project Costs & Benefits thru FY 1979 (in $1,000)							
	Project Costs			O & M Costs			Benefits	
	Total Costs	Federal	Non-Federal	Total O & M	Federal	Non-Federal	Recreation	Flood Control
Local Protection Projects								
Kansas Citys	47,553	$42,433	$5,120	$8,430	0	$8,430	None	$2,139,150
Topeka	31,558	21,175	10,383	1,443	0	1,443	"	67,505
Lawrence	10,520	8,390	2,130	298	0	298	"	4,086
Big Stranger Cr.	343	337	6	75	0	75	"	469
Stonehouse Cr.	349	247	102	32	0	32	"	30
Manhattan	2,754	2,489	265	169	0	169	"	3,229
Frankfort	1,395	1,271	124	67	0	67	"	112
Fairbury	747	727	20	7	0	7	"	280
Seward	134	127	7	23	0	23	"	2,609
Abilene	1,386	1,099	287	55	0	55	"	No Record
Salina	5,839	3,879	1,960	187	0	187	"	4,923
Barnard	161	128	33	7	0	7	"	216
Clyde	1,057	881	176	26	0	26	"	23
Bartley	128	118	10	27	0	27	"	19
Indianola	75	67	8	24	0	24	"	23
Atchison	4,365	4,100	265	22	0	22	"	No Record
Bedford	616	587	27	7	0	7	"	60
Chariton R. (1944 Act.)	8,788	8,053	735	450	0	460	"	5,628
Ottawa	5,339	4,463	876	141	0	141	"	9,075
Osawatomie	2,365	2,037	348	20	0	20	"	1,149
New Haven	151	140	11	14	0	14	"	100
Total Local Protection	$125,643	$102,748	$22,895	$11,554	0	$11,554	None	$2,238,086

Senator KASTEN. Thank you very much, Mr. Paramore. You have a lot of people here representing this project. Would you like to introduce them or do you have them all on a list and possibly we can make their personal participation here part of the permanent record of this subcommittee.

Mr. KIRK. I will let Mr. Jim McPherson, executive vice president, come up here and do that. We want to thank you very much.

Senator KASTEN. Mr. McPherson.

Mr. MCPHERSON. Mr. Chairman, we filed the witness list with the committee. We would appreciate it being printed in the hearing record. I won't take any more time. If you could just have our people rise, then we will vacate and leave you to move on to something else.

Senator KASTEN. We are very, very pleased to have you here and I am sorry; we got trapped, I guess. We very much appreciate the personal participation of all of your group and I think that the fact that the budget shows that you as a group of people with strong support from your representatives in the government can, in fact, really make a difference.

We thank you very much for your participation here this morning.

ADDITIONAL PREPARED STATEMENTS

I note that there are additional statements which you have submitted, Mr. McPherson. Those will be made part of the record at this point, along with a complete list of the witnesses.

[The statements follow:]

WITNESS LIST

MO-ARK ASSOCIATION

HEARINGS BEFORE THE
ENERGY AND WATER RESOURCES
SUBCOMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE AND HOUSE OF REPRESENTATIVES

Ray Kirk, President
Mo-Ark Association
Weston, Missouri

L. M. Schwartz
Paola, Kansas
Hillsdale Dam

Leon Brownfield
Kansas City, Missouri
City Council

Winston Rashleigh, Chairman
Missouri River Shippers Committee
Fremont, Nebraska

John McKenzie, Exec. V. P.
SCNO Barge Lines, Inc.
St. Louis, Missouri

John Morrison
Huffman Towing Company
St. Louis, Missouri

Buford Watson
Lawrence, Kansas
Clinton Dam

Lew Paramore, Exec. Vice
President Emeritus
Mo-Ark Association
Kansas City, Kansas

James C. Hart
Gardner, Kansas
Hillsdale Lake

David Mills, President
Clinton Chamber of Commerce
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Helen Machnicki, Pro Tem
City Council
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Joan Compton, Exec. Director
Chamber of Commerce
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Judge Edward J. Bauman
Clay County Court
Liberty, Missouri
Smithville Lake Project

Willard Pence, Mayor
Smithville, Missouri
Smithville Lake

Bishop Willard Becker
Independence, Missouri
R.L.D.S. Church, City of
Independence and Chamber of
Commerce

Don Elefson
Independence, Missouri
R.L.D.S. Church, City of
Independence and Chamber of
Commerce

Glen Toalson
Osceola, Missouri
Truman Dam and Reservoir

Ernest Barker
Osceola, Missouri
Truman Dam and Reservoir

T. D. Fleming, President
Upper Osage-South Grand Assn.
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Mrs. T. D. Fleming
Clinton, Missouri
Harry S. Truman and Dam Reservoir

Peter Werner, Sheriff
Henry County Missouri
Clinton, Missouri
Harry S, Truman Dam and Reservoir

John Gill
Kansas City, Missouri
Missouri River Levees

Jack Brisco
Monroe City, Missouri
Cannon Dam Reservoir

Bill Meyers
Monroe City, Missouri
Cannon Dam Reservoir

Charles Rendlin, III
Monroe City, Missouri
Cannon Dam Reservoir

Jennifer Clouse
Clinton Chamber of Commerce
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Patrick Reilly
City of Clinton
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Richard King, Mayor
City of Clinton
Clinton, Missouri
Harry S. Truman Dam & Reservoir

Jane Putnam
Headwaters Association
Warsaw, Missouri
Harry S. Truman Dam & Reservoir

Gene DuVall
Fort Scott, Kansas
Fort Scott Lake

Mrs. Charles Rendlin, III
Monroe City, Missouri
Cannon Dam Reservoir

Dolores Banks
Mo-Ark Association
Kansas City, Kansas

James A. McPherson
Executive Vice President
Mo-Ark Association
Kansas City, Kansas

Roy Phillips
El Dorado, Kansas
El Dorado Lake

Mrs. Roy Phillips
El Dorado, Kansas
El Dorado Lake

LETTER FROM JOE W. STEPHENSON, MAYOR, EL DORADO, KANS.

March 24, 1981

Mr. Mark Hatfield, Chairman
U.S. Senate
Subcommittee on Energy & Water Development
Washington, D.C. 20510

Dear Mr. Hatfield:

We the undersigned, duly elected and constituted representatives of the City of El Dordo, Kansas do hereby request and urge the United States Senate to increase the President's recommended budget allocation and appropriate to the full Corps of Engineer's capability of $4,100,000 for continued construction of the El Dorado Reservoir.

In 1972, the City of El Dorado entered into an agreement with the Secretary of Army to guarantee repayment of the municipal industrial water supply in the El Dorado Reservoir. At the time, the people of El Dorado approved the contract at a special election and agreed to pay approximately 37% of the total cost. We urge the Congress to appropriate to the full Corps capability in order to keep the project on its timetable and to not needlessly permit the cost to escalate due to inflation.

The City of El Dorado lies in the midst of a rich agricultural cattle raising land, surrounded by two large oil refineries, one being the largest in the State of Kansas. The health and vitality of this area is closely linked to the interest of the nation's well being. The area, however, is alternately threatened with floods and drought, currently characteristic of the Kansas Walnut Valley Basin. A devastating flood struck our area on June 8, 1979. We are now in a drought. The City's current water supply will only last until about August unless large rains are received. Our request for funds today is another step in a long road of effort dating back to 1958, to secure economic stability and prosperity in our region.

Construction of the El Dorado Reservoir is now underway. The City of El Dorado urges an appropriation which will keep the project on schedule. We consider the City to be a partner with the Federal Government in this project. The local taxpayers have agreed to the contract with the Department of Army to share in the construction cost. We seek, in light of our financial interest, your utmost consideration of our request.

Respectfully,

Mayor

Commissioner

Commissioner

Marilyn White
Commissioner

Commissioner

STATEMENT OF JOAN W. COMPTON, EXECUTIVE DIRECTOR, CLINTON (MO.) CHAMBER OF COMMERCE

After sixteen years of starts, stops and slow downs the Harry S. Truman Dam & Reservoir project is now 86% complete. I guess I should be saying,

"Yippee!"

That's not how I feel. There are days I could scream so loud you could hear me all the way to Washington, D. C. and then there are days I could sit down & cry! I know neither will do any good. I love our Country and I love the area in which I live, work and raise a family. I'm supportive of the President's efforts to balance the budget, to cut out waste, to do this, to do that. But, I see what budget cuts and regulations are doing to our area and I simply shudder.

For many years agricultural production was the main stay for Henry County. With over 60,000 acres taken out of production and another 31,000 plus acres with flowage easements in our County, alone, this is no longer the case. We must now place our efforts in other directions.

The natural thought would be tourism . . . Great, you say, Truman Dam & Reservoir is 86% complete. Of course, that's total complete. In reality, the public use areas are less than 40% underway or complete. With the total of $465,000,000 appropriated for Truman, thus far, less than $25 million has gone for public use areas. Considering the potential return of revenue to the government and to the area from this source that's a pretty pathetic investment.

We are being beseiged with people at our tourist information center and at boat and travel shows wanting information on Truman. It's difficult to provide this information when so little is completed.

I mentioned before budget cuts and Federal regulations. Let me expound a little further on these:

Just this past week, a highway project, which we have been working on for about as many years as the Truman project, has been placed on the shelf: Unimportant - yes or no. Well, that highway was operating at a 200% capacity prior to Truman. It's now expected to exceed 600%!

Here's another goodie - Coal mining, at one time, another major industry in our area: One mine already closed, a second considering it. Valuable jobs lost . . . Why? Rigid Federal Regulations!

You work your rump off trying to find other jobs to replace these jobs and you run into more Federal Regulations! My most recent encounter has been with hazardous waste. How you can tack the term "hazardous" onto some liquid that is only flamable is beyond me. After about a month and at least 30 phone calls I found out that: You can't pour it out, that would be in violation of the Clean Water Act; You can't bury it because you can't bury anything that is flamable & liquid; You have to incinerate it. Of course, the nearest approved incinerator is only 450 miles away, and they won't accept the barrel until they have a sample. Probably has something to do with the Clean Air Act.

If you think I'm frusterated you're right! One of my primary duties is to create more jobs, but how does one go about it?

You can help us get the economy moving, again, in our area by restoring the Corp's full capabilities and also gain a return on your investment.

Statement of Edward J. Bauman, Presiding Judge, Clay County, Mo.

For over a decade the United States Army Corps of Engineers, has been constructing the Smithville Reservoir in Clay and Clinton Counties in Missouri. When finished, this project will end flood problems caused by the Little Platte River. Equally as important, it will establish a major park and recreational facility for the entire Kansas City Metropolitan Area.

To date, over $90,000,000 in public funds has been expended on this project. Final completion is scheduled for 1983. We presently project that upwards of a million and one-half persons a year will soon be taking advantage of this exciting facility.

As Presiding Judge of Clay County, I would like to express to this committee and to the United States Congress, the gratitude of the Clay County Court and Clay County Citizens for past support of this project. We appreciate the interest and the efforts of the many individuals who have brought the Smithville Reservoir to this point and will be making possible its final completion.

We view this project as a singular example of Federal-Local partnership in recreational development. Clay County, Missouri has agreed, through a lease agreement with the Corps of Engineers to operate and maintain virtually all lands adjacent to the Reservoir in Clay County. The lease calls for Clay County to pay almost $14,000,000 to the Corps over the next 50 years for this land and the recreational facilities constructed thereon. We are excited about this unique opportunity.

The Corps of Engineers informs us that an additional $2,963,000 will be required this year for the project. These funds would assure the completion of the Reservoir and its related facilities. We urge that this committee give favorable consideration to this amount of funds.

Statement of Peter R. Werner, Sheriff, Henry County, Mo.

In my position as Sheriff and appointed representative, I can relate, first hand, the impact this project is having on the financial and social structure of Henry County, Missouri.

The permanent population of Henry County has not fluctuated more than 450 over the last 20 years; however, the financial obligations have increased 500% during the last eight years (Sheriff's Department $49,000-1973, $250,000-1981). The cost of public services per capita has risen dramatically due to the construction of the Reservoir. Due to the failure to complete the tourist/visitor facilities in Henry County, we are losing the tourist/visitor contribution to the support of government services which would have been partially financed by the lost property taxes. The tremendous financial burden of supplying governmental services to these visitors is awesome.

Now that the water retention portion of Truman Reservoir is completed, some tourists are going to come and utilize this lake even though these facilities are incomplete. This creates the secondary problem of importance in the usage of Reservoir property. The visitor/tourists will develop "camping sites" that are on Corps of Engineers property but not located on visitor facility sites where there are sanitary facilities, crowd control, protection, rules, regulations or law enforcement.

This development of "extra" camping sites has created expensive problems of thefts, vandalism, fights, drugs, sanitation and all these calls for services will be paid for by the county government.

Please complete the last portion of this tremendous project, complete the visitor facilities to help increase our revenue income and aid the law enforcement, visitor protection in Henry County.

Gentlemen we appreciate and thank you for your past confidence and support of this project, and we appreciate and look forward to your consideration of this project in the future.

STATEMENT OF BUFORD WATSON, CITY MANAGER, LAWRENCE, KANS., AND MEMBER, MO-ARK BOARD OF DIRECTORS

I am Buford Watson, City Manager of Lawrence, Kansas, member of Mo-Ark Board of Directors, and selected spokesman for Douglas County, Kaw Valley Water Management Association, Kaw Valley Basin Management, and the City of Lawrence.

We wish to thank you for your past considerations toward our community that resulted in the dedication of Clinton Lake last July. We know we will be much better able to endure should the present drought continue.

We support all capital investment in the future of America and that is what the Mo-Ark projects are - a better America tomorrow from today's efforts. We further urge continued study of the bank stabilization and water quality problems on the lower Kansas River.

Clinton Lake, specifically, has $1.1 million requested for orderly completion of service areas and continuing operations. Our local people tell me that, though they could do more, this is a very reasonable figure. We support the recommended budget figure.

Thank you for your time.

Ed Carter
Ed Carter, Mayor
Lawrence, Kansas

Bob Neis
Bob Neis, Chairman
Board of Douglas County Commissioners

Don Westheffer
Don Westheffer, President
Kaw Basin Water Management Association

George T Faler
George T. Faler, Sr., President
Douglas County Kaw Drainage District

Buford M Watson
Buford M. Watson, Jr., City Manager
Lawrence, Kansas

S J Schaub
S. J. Schaub, President
Lawrence Chamber of Commerce

Don Westheffer
Don Westheffer, Chairman
Water Conservation Committee
Lawrence Chamber of Commerce

LETTER FROM FRANCINE NEUBAUER, EXECUTIVE DIRECTOR, KANSAS WATER RESOURCES BOARD

January 27, 1981

Mr. Paul D. Barber, Chief
Engineering Division
U.S. Corps of Engineers
700 Federal Building
Kansas City, MO 64106

Dear Mr. Barber:

Reference is made to discussions between our respective staffs concerning the interest of the Kansas Water Resources Board in the construction of the Fort Scott Reservoir, Bourbon County, Kansas. We understand that the Corps of Engineers is completing a Reconnaissance Report on the reservoir which indicates a feasible project may be developed. As indicated by your staff, the Corps would like to obtain the views of the State of Kansas regarding the development of this reservoir.

From the information presented, we understand that approximately 49,000 acre-feet of conservation storage could be incorporated for water supply purposes. From our studies, we believe there is need for conservation storage in the Fort Scott Reservoir for municipal and industrial water supply to service the general area. Potential water users that have indicated an interest in the water supply storage include the cities of Pittsburg and Fort Scott, Kansas, and possibly Nevada, Missouri. The need for additional municipal and industrial water supply in the general area of the reservoir is also supported, in part, from information contained in our Southeast Kansas Water Supply Report. We would also consider a possible use of a portion of the future storage for development of electric energy in the area.

We would advise that time has not permitted a review by the Kansas Water Resources Board itself; and therefore, the views expressed in this letter must be treated as tentative until such time as the Board has an opportunity to review this matter and make a final determination. However, the Board has expressed interest in the development of the Fort Scott Reservoir on previous occasions; and we do not anticipate any major change in this policy decision. Certainly, from the standpoint of southeast Kansas, we feel there is a need for additional water supply storage; and we encourage the Corps of Engineers to complete the Reconnaissance Report in order that the State of Kansas may have an opportunity to review the detailed information and make a final decision as to their continued interest.

Your consideration of this matter is greatly appreciated.

Sincerely,

s/s

Francine Neubauer
Executive Director

STATEMENT OF LEON BROWNFIELD, CITY COUNCILMAN, KANSAS CITY, MO.

I am Leon Brownfield, City Councilman of Kansas City, Missouri, and I am chairman of its Legislative Committee. I am speaking for and on behalf of Mayor Richard Berkley and the City Council.

I have reviewed President Reagan's Recommended Budget for FY 1982 and am pleased that it closely parallels the reported capabilities of the Corps of Engineers to effectively utilize funds for water resource projects in our immediate area.

The Blue River is extremely important to Kansas City. This stream flows generally north-south through the principal heavy industrial area of the city. The authorized Blue River project lies wholly within our corporate limits. Severe flooding occurs in the valley with extreme frequency and for many years the vital industrial base of this important industrial area has steadily deteriorated. A flood control program has been authorized for this stream for many years. The Corps of Engineers' planning is in an advanced stage and the first construction contract is expected to be awarded early this summer. Channel improvements constitute a viable, effective and feasible project that has been delayed for many years for reasons totally beyond the control of Kansas City. Delay has been extremely costly in economic development and in jobs. We urge the appropriation of $4.4 million for construction of Blue River channel improvements in FY 1982. You may also like to know that Kansas City currently is planning to appropriate $528,000 in its Capital Improvement Program for local work associated with the project.

We are also vitally interested in the Little Blue River Project. We support 1982 appropriations consistent with the capability of the Corps of Engineers for the Little Blue River Lakes and Channel improvements.

Kansas City also supports the several projects in Missouri and Kansas for which our delegation is appearing today. We very much appreciate the realistic support accorded these undertakings in the budget recommended by President Reagan for FY 1982.

Statement of David L. Mills, President, Clinton (Mo.) Chamber of Commerce

As President of the Clinton Chamber of Commerce it is a priviledge to appear before this committee.

On behalf of the 450 businesses of Clinton we wish to express our appreciation for your past support of the Harry S. Truman Dam and Reservoir Project.

As this project is 86% completed the impact to our area is already apparent. Several new businesses have opened their doors as a result of this project but if not completed on schedule these new businesses will suffer. In regard to these businesses it is necessary to complete the public use areas which are now only 40% completed.

The Clinton Chamber of Commerce has a new tourist information bureau open but we are unable to direct people to the new public use areas because they are not yet completed.

The Corps of Engineers has the capability of utilizing $20,700,000 for this project and we would urge you to provide the necessary funds to meet the full capability. If these funds are not provided it will not only prolong the completion of the project but due to inflation it will cost the taxpayers more.

We appreciate your past consideration and support and solicit your continued interest and support so that the Truman Dam and Reservoir project can be completed as soon as possible.

Statement of Jack G. Rowlett, Mayor, Paola, Kans.

The City of Paola, Kansas, a community of about 5,000 people located on Bull Creek less than three miles down stream from the Hillsdale Lake project has for many years requested fund appropriations for the construction of this project.

At this time we again request that you continue the necessary financial support to bring this project to completion. We understand that closure of the structure will be this fall and the new appropriations are to provide final clean-up and public access to the area.

The citizens of Paola have had two major concerns in relation to this project: 1) flood control and 2) a source of public water supply. The demonstrated need for both is within the easy memory of us all. The dry conditions prevailing in Eastern Kansas today would concern us far less if the Hillsdale Project was complete and full of water.

The citizens and public officials of the Paola area wish to take this opportunity to thank you and all the members of Congress for making the necessary funding available for this project. Further, we wish to thank you for the courtsey and understanding you have shown our citizens who have appeared before you in our behalf.

Statement of Frank E. Hostetter, Mayor, Osceola, Mo.

On behalf of the Citizens of Osceola, Missouri, I wish to express appreciation for your courtesy and consideration extended our delegation today, and on previous occasions.

For the past fifteen years our community has been going through a severe economic decline because of delays in the completion of the Harry S. Truman Project. Government acquisition of farms, businesses and homes has created a depression within our City. The only way of recovery is the completion of the recreational areas of the project. Then and only then can business and industry related to tourism be developed.

Our City urges you to fund the Harry S. Truman Project to the full capability of the Corps of Engineers.

Thank you for your consideration and courtesy.

Letter From Francine Neubauer, Executive Director, Kansas Water Resources Board

March 6, 1981

Mr. Paul Barber
Chief, Engineering Division
Kansas City District
U.S. Corps of Engineers
700 Federal Office Building
Kansas City, Missouri 64106

Dear Mr. Barber:

Reference is made to our letter of January 27, 1981 transmitting staff comments relative to the interests of the Kansas Water Resources Board in the development of the Fort Scott reservoir. As noted in this letter we indicated that the comments were those of the staff subject to review and concurrence by the Board.

This is to advise that at the regular meeting of the Kansas Water Resources Board on March 5, 1981 this subject matter was reviewed and by unanimous action the Board indicated concurrence in the staff position.

If you have any questions regarding this action, please do not hesitate to contact us.

Sincerely,

Francine Neubauer
Executive Director

STATEMENT OF HELEN MACHNICKI, COUNCILPERSON, CLINTON, MO.

I THANK YOU FOR THE OPPORTUNITY TO APPEAR TODAY AS THE REPRESENTATIVE OF THE MAYOR AND CITY COUNCIL OF THE CITY OF CLINTON, MISSOURI.

WE HAVE RECENTLY EMBARKED ON A CONCENTRATED EFFORT TO BRING INDUSTRY TO OUR CITY, AND THE COMPLETION OF THE TRUMAN DAM AND RESERVOIR IS A PRIMARY ATTRACTION TO THE INTERESTED FIRMS. WE CONSIDER THE COMPLETION OF THE PUBLIC USE AREAS TO BE OF VITAL IMPORTANCE TO OUR SUCCESSFUL INDUSTRIAL GROWTH, AS WELL AS THE CONTINUATION OF OUR LOCAL BUSINESSES NOW IN OPERATION, AND THOSE RETAIL FIRMS WHO ARE IN THE PROCESS OF ENLARGING THEIR PRESENT OPERATIONS. OUR LOCATION NEAR THE RESERVOIR AREA AND MAJOR PUBLIC USE AREAS WILL CHANGE THE ECONONIC PROJECTION OF OUR CITY TO ONE OF PROSPERITY AT A TIME WHEN WE ARE FACED WITH A DOWNTURN IN BUSINESS.

WE APPRECIATE THE CONSIDERATION AND SUPPORT YOU HAVE GIVEN US IN PAST YEARS AND HOPE THAT IT WILL BE POSSIBLE TO INCLUDE THE FULL AMOUNT OF THE CORPS OF ENGINEERS CAPABILITY, $20,700,000 IN YOUR RECOMMENDATION FOR FISCAL YEAR 1982.

STATEMENT OF GENE DUVALL, MARMATON RIVER FLOOD CONTROL AND CONSERVATION ASSOCIATION

The completion of this reservoir for the storage of water to supply urban and agricultural needs in Southeast Kansas and Southwest Missouri is critical.

At least 12 cities and a large rural area will rely on this impoundment for their present and future water supply, which they are willing to purchase. The Directors of the Kansas Water Resources Board have acknowledged this need and have expressed their interest in the development of the reservoir for water storage and the sale of it. This benefit in itself will return to the government and the people many times the investment. However, this multi-purpose impoundment will provide benefits in many other ways such as flood control and possible hydro-generated electrical energy.

Funds that you have properly appropriated in past years have allowed the surveying and engineering for this project to be completed. Also, you have voted appropriations for Phase I and II of the final 3 phase study and plans. We ask that funds for the maximum capability specified by the Army Corps of Engineers be appropriated in FY 82 for the completion of the plans and study. Such funds have been included in their budget for FY 82.

Even though this project is small in cost comparison with many such projects the benefits will be great and it will have a favorable impact on many people and communities.

STATEMENT OF RICHARD H. KING, MAYOR, CLINTON, MO.

OUR DELEGATION FROM THE CITY OF CLINTON IS AGAIN APPRECIATIVE OF THE OPPORTUNITY TO APPEAR BEFORE YOU IN REGARD TO THE FUNDING FOR THE HARRY S. TRUMAN DAM AND RESERVOIR PROJECT.

THIS PROJECT, SO IMPORTANT TO THE ECONOMY IN OUR CITY AND THE ENTIRE SURROUNDING COMMUNITY, IS NEARING COMPLETION. OUR MAJOR CONCERN IS THE CONSTRUCTION OF THE PLANNED RECREATION AREAS. FOR THE PAST 17 YEARS, OUR PLANS FOR CITY DEVELOPMENT AND EXPANSION, ROAD AND PLANNED BUSINESS DISTRICTS, AND OUR PARKS AND RECREATION PROGRAMS, HAVE BEEN PROPOSED WITH THE COMPLETION OF THE TRUMAN DAM AND RESERVOIR IN MIND. OUR LOCATION, AS THE LARGEST CITY NEAR THE PROJECT AREA, HAS MADE THIS ONE OF THE PRIME LOCATIONS FOR DEVELOPMENT, AND MUCH TIME AND MONEY HAS BEEN EXPENDED ON PLANNING FOR THE ULTIMATE CONCLUSION OF THE HARRY S. TRUMAN DAM AND RESERVOIR.

COUNCILPERSON HELEN MACHNICKI IS APPEARING BEFORE YOUR COMMITTEE AS THE REPRESENTATIVE OF THE MAYOR AND CITY COUNCIL OF CLINTON, AND TOGETHER WE URGE YOU TO CONSIDER THE FULL AMOUNT OF THE CORPS OF ENGINEERS CAPABILITIES AND THE REQUEST OF THE MO-ARK ASSOCIATION FOR FISCAL YEAR 1982, IN THE AMOUNT OF $20,700,000.

COLUMBIA BASIN PROJECT, WASHINGTON

STATEMENT OF THOMAS B. LYDA, DIRECTOR, COLUMBIA BASIN DEVELOPMENT LEAGUE

ACCOMPANIED BY:
ERVIN G. EASTERDAY, DIRECTOR, SOUTH COLUMBIA IRRIGATION DISTRICT
RUSSELL WENTWORTH, DIRECTOR, QUINCY COLUMBIA BASIN IRRIGATION DISTRICT

Senator KASTEN. I now would like to ask the representatives of the Columbia Basin project, Mr. Tom Lyda, executive director of the Columbia Basin Development League; Mr. Russell Wentworth, director, Quincy Columbia Basin Irrigation District; and Mr. Ervin G. Easterday, director, South Columbia Irrigation District, to come to the witness table.

Mr. LYDA. Mr. Chairman, I am Thomas B. Lyda, director of the Columbia Basin Development League. First, we thank you for this opportunity to be here and to be heard by this committee. We have two items of particular interest. One is the fiscal year 1982 budget for the Columbia Basin project in the State of Washington as presented by the President in the budget for irrigation facilities. There we have $17,450,000, which includes the completion of the last powerplant on Grand Coulee Dam which will continue to make that powerplant the largest generating plant in the world. The second phase of the budget is a completion of cleanup work around the powerplant and some upriver and down-river bank work in the amount of $27,290,000, for a grand total of $44,740,000. We believe these to be direct program costs and for that reason we will support each line item of the budget. This is a continuation program of work already underway. The operations and maintenance of the project will be kept on a current basis.

The second part of the testimony has to do with just a brief overview of the project which I will keep down. There is a 1,095,000-acre project which will require about 2.3 percent of the annual flows of the Columbia River basin and will feed in excess of 10 million people.

In 1979 the project costs, including construction of the canal system and the powerhouses and the dams, were estimated to be $3,031,000,000. As of September 1980, about $1.4 billion has been spent on construction, or about 46 percent of the estimated cost. The major portion of the project cost will be returned to the U.S. Treasury, costs allocated to power and irrigation will be repaid.

At this date, about 49 percent of the land to be reclaimed for irrigation has been placed under production. There are two major siphons in this project. The first is being used to capacity in 1979. The second has been completed as of 1980 and is now ready for the flow of water to the second half of the project. However, we must have delivery systems from the end of that tunnel on to the project. This is not in the fiscal year 1980 budget. I merely call this to the attention of the Committee so that in the future years it will be aware that there is continuation.

There are two key elements now under contention between the Water and Power Resource Service and the water users. These elements are: Does the project continue to be developed according to original plan; and the second is, what is needed to update the water contract? We call these to the attention of the Energy and Water Development Subcommittee because both must be settled in order for uninterrupted development of the project. Moving ahead is a continuous matter for this project and it will be sometime in the 20th century before the project is completely done.

I would now call upon Director Easterday for additional comments.

Mr. EASTERDAY. Mr. Chairman, I am Ervin Easterday and have been a farmer for many years in the Columbia Basin project and also a member of the board of directors of the South District.

This presentation that I have has been somewhat reversed by Mr. Tom Lyda, but I will continue through this for the record and then introduce my colleague to the right.

We have had some time delays on this project. So I will just read it. The time delays are proving to be very costly due to inflation. Some time delays are tied to National Environmental Protection Agency studies and procedures. We believe these must be streamlined and reduced.

Other time delays are being encountered in the manner of application of reclamation laws. We believe the payment capacity of farmers should continue to have a contingency factor recognized in a contract as updated. This would retain the same philosophy for the second half of the project as for the first half. The farmers want to be able to handle unexpected financial and crop losses with the assistance of the contingency factor so that they can be better able to keep up on the repayment schedule and meet the increasing costs of new farm unit development and operations.

As partners in development, you may wish to exercise your influences on these items in the flow of congressional business.

The Columbia Basin project has been, and will continue to be, one of the great American developments come true if all of us can continue to work on the complex aspects of what is really a very simple plan.

The land is there awaiting better utilization. The water is there and all of its potential is not now being used. We can put it to full use. The acres cropped in 1980 were estimated at 544,000 with a crop gross value around $240 million.

The hydroelectric power generation in 1980 was about 18,881, 153,000 kilowatt-hours sold at over $108,820,000. The recreational user-days in 1979 exceeded 2 million.

As the demands for energy continue to accelerate we are pleased to tell the Energy and Water Development Subcommittee on Appropriations that they are major factors in keeping the largest power production plant in the entire world right on the development and operational schedule budgetwise.

As several million acres of farm land in the United States are removed from the cropping pattern annually due to urbanization, highway construction, and unsuitable farming conditions due to drought, erosion, or land being worn out, replacement acres must be planned and kept on development schedules.

Should the domestic market not demand all the production of this project at certain times, the export of the food and fiber from the project to the Pacific rim and Mideast countries becomes increasingly significant and strategic.

There is also something I might add here. We talk about erosion at given parts of the country. We must feed the gods out there because we have got from 1 to 3 inches of new virgin soil last year. I want to thank the chairman for the privilege to do this. At this time, I would like to introduce Mr. Russell Wentworth of the Quincy Columbia Basin Irrigation District.

Senator KASTEN. Thank you, Mr. Easterday.

Mr. Wentworth.

Mr. WENTWORTH. Thank you, Mr. Chairman. We have submitted written testimony for the record. Therefore, I will, in the essence of time, omit any oral testimony unless you have some questions.

Senator KASTEN. I appreciate very much all four of you gentlemen appearing here in person. A full copy of the material that is provided by you will be a part of the permanent record of the subcommittee and we thank you very much for your participation here this morning.

[The statement follows:]

Statement of Thomas B. Lyda, Director, Columbia Basin Development League

I. Support for the FY 82 Budget

Department of the Interior Program
for the
WATER AND POWER RESOURCES SERVICE

Washington

COLUMBIA BASIN PROJECT

MAJOR ITEMS	FY 82 Appropriation
Irrigation Facilities:	
Grand Coulee Pumping/Generating Plant Units P/G 9, 10, 11, 12	$ 5,542,000
Block 26 Laterals	1,350,000
Fish and Wildlife Facilities	555,000
Drainage Construction	5,668,000
Deferred and Supplemental Construction	3,835,000
Deferred and Bypassed Lands	400,000
East High Canal Irrigation System	100,000
Total - Irrigation Facilities	$ 17,450,000
Third Powerplant :	
Third powerhouse (Riverbank Stabilization Program and Clean-up Activities)	$ 23,650,000
Third Powerplant Switchyard Modifications	2,900,000
Visitor Facilities	740,000
Total - Third Powerplant	$ 27,290,000
Grand Total - Columbia Basin Project	$ 44,740,000

Statement:

We believe these to be Direct Program Costs and for that reason we support each line item and the total budget request.

This will be a continuation program of work already underway.

The operations and maintenance will be kept on a current basis.

II. COLUMBIA BASIN PROJECT CONTINUATION AND DEVELOPMENT.

BRIEF OVER VIEW

The Columbia Basin Project was authorized by Congress and the first components started to be operational in 1941. The Grand Coulee Dam is the head location works of the project.

The yearly average discharge of the Columbia River system is about 170,000,000 acre feet of water.

The 1, 095, 000 acre project, when completed will require about 4,000,000 acre feet or 2.3% of the flows for irrigating crops that will feed more than 16,000,000 people.

In 1979 the total cost of the Columbia Basin Project, including construction of the irrigation system to serve the 1, 095, 000 acres and the 6,480,000 kilowatt capacity powerplant was estimated to be $ 3,031,000,000. This is allocated to : Power, $ 890,000,000; Irrigation, $ 2,078,000,000; Flood Control and Navigation,$49,000,000; Fish and Wildlife, $ 12,000,000; and Historical and Archeological Study and Salvage Activities, $ 2,000,000.

As of September 1980 about $ 1,400,000,000 had been spent on construction. This is about 46% of the estimated costs of the project.

The major portion of the Project costs will be returned to the Unites States Treasury. Costs allocated to power and irrigation will be repaid. Costs allocated to flood control, navigation, fish and wildlife, and some minor items are nonreimbursable.

Irrigation water users pay for all operation and maintenance costs of the irrigation facilities. In 1979 543,721 acres were croped under irrigation. This was 49.6% of the authorized acres.

There are two major siphontunnels at the top end of the Project to take irrigation water across rough terrain to canal headworks. The first tunnel was being used to capacity in 1979. Congress, through the leadership of members of the Energy and Water Development Subcommittee of Appropriations, provided funds to start construction of the second tunnel which is to bring the water for the second half of the Project. The State of Washington put in $ 15,000,000 of the $53,000,000 costs of the tunnel. In 1980 that structure was completed.

BUT, There is no place for the water to flow for use from the end of the tunnel until we get the EAST HIGH CANAL SYSTEM and other modifications in the delivery system built!

PRESENT AND FUTURE CONCERNS

The Water Power Resources Service and the three Columbia Basin Irrigation Districts have worked together in in the planning, custodial, and service functions and do a good job in getting water to each farm unit.

Modern technology has been put into practice in order to conserve water and to recover energy from the delivery system flows. Low-head hydro electric plants are being placed throughout to Project at suitable drop points with total funding costs being arranged by the irrigation districts. Power production comes on line from the first of these plants in 1981. Center pivot sprinkler systems, and other conservation of water, including recovery of return flows, erosion controls, and diversified cropping make the Project a model in reclamation.

Continuation of the development of the Project is and on-going thing but runs into difficult times when the Department of Interior wishes to make major changes in contracts with the water users. Such changes are now being talked about at meetings on the Project for the purpose of up-dating the Master Water Service Contract. The second half of the Project water delivery rates are the subjects of the talks.

The Columbia Basin Development League and the Columbia Basin Irrigation Districts want to follow the original plans and structure for the Project as closely as possible. There are two key elements now under contention between the Water Power Resources Service and the water users. These elements are:

Does the Project get developed according to the original plan and size? If so,the water must start at the top elevations.

What is needed to up-date the Master Contract? At issue here is the payment capacity of the farmer.

We call these to the attention of the Energy and Water Development Subcommittee because both must be settled in order for uninterrupted development of the Project and time is becoming of the essence. Moving ahead in a continuous manner on this Project will still make a completion schedule taking us into the 20th century.

Time delays are proving to be very costly due to inflation. Some time delays are tied to National Environmental Protection Agency studies and procedures. We believe these must be streamlined and reduced.

Other time delays are being encountered in the manner of application of Reclamation Laws. We believe the payment capacity of farmers should continue to have a contingency factor recognized in a contract as up-dated. This would retain the same philosophy for the second half of the Project as for the first half. The farmers want to be able to handle unexpected financial and crop losses with the assistance of the contingency factor - so that they can be better able to keep up on the repayment schedule and meet the increasing costs of new farm unit development and operations.

As partners in development you may wish to exercise your influences on these items in the flow of Congressional business.

In conclusion:

The Columbia Basin Project has been and will contiune to be one of the great American Development come true if all of us can continue to work on the complex aspects of what is really a very simple plan.

The land is there awaiting better utilization. The water is there and all of it's potential is not now being used. We can put it to full use. The acres cropped in 1980 were estimated at 544,000with a crop gross value around $ 240,000,000.

The hydro electric power generation in 1980 was about 18,881, 153,000 Kilowatt hours sold at over $108, 820,000. The recreational uses day in 1979 exceeded 2,000,000.

As the demands for energy continue to accelerate we are pleased to tell the Energy and Water Development Subcommittee on Appropriations that they are major factors in keeping the largest power production plant in the entire world right on the development and operational schedule budgetwise.

As several million acres of farm land in the United States are removed from the cropping pattern annually due to urbanization, highway construction,and unsuitable farming conditions due to drought, erosion, or land being worn out replacement acres must be planned and kept on development schedules.

Should the domestic market not demand all the production of this project at certain times, the export of the food and fiber from the Project to the Pacific rim and mid-east countries becomes increasingly significant and strategic.

Mr. Chairman , we thank you for hearing us. We sincerely appreciate the considerations and actions of this committee.

STATEMENT OF RUSSELL WENTWORTH, PRESIDENT, QUINCY-COLUMBIA BASIN IRRIGATION DISTRICT

The Quincy-Columbia Basin Irrigation District welcomes this opportunity to present to your Committee its comments relating to the proposed budget for the Columbia Basin Project for Fiscal Year 1982.

The Quincy District is one of the three irrigation districts of the Columbia Basin Project, the other two irrigation districts being the South and East Irrigation Districts. Presently, approximately 550,000 acres of Columbia Basin Project lands are being irrigated by virtue of irrigation facilities constructed by the United States under the Reclamation Act of 1939.

The Directors, in reviewing the proposed appropriations for the Project, are pleased to note the amounts included for the Third Power Plant of the Grand Coulee Dam.

In reviewing the remainder of the proposed Fiscal Year 1982 appropriations, the Quincy District is also pleased to note the suggested amounts for those items, such as drainage construction and deferred and supplemental construction, which are vital to maintain the integrity of the Project.

While not particularly appropriate as to commenting on the proposed appropriations, the Directors of the Quincy District would like to call to the attention of the Committee the interest of the three Columbia Basin Project irrigation districts in assuming the operation and maintenance of the Reserved Works of the Project. Primarily, the Reserved Works consist of irrigation facilities common to all three districts and which said Reserved Works have not yet been transferred to the districts for operation and maintenance. In the event the transfer of the Reserved Works is accomplished, the Quincy District is confident that such transfer will be most beneficial both to the United States and to the Columbia Basin Project irrigation districts.

To summarize, the Directors of the Quincy District fully support the Fiscal Year 1982 proposed appropriations for the Columbia Basin Project and request your support in approving the same.

STATEMENT OF C. D. BAILEY, SECRETARY-MANAGER, EAST COLUMBIA BASIN IRRIGATION DISTRICT

The East Columbia Basin Irrigation District is pleased to support the President's Budget for the Columbia Basin Project for FY 1982. We are very happy to see the appropriations for the Block 26 Laterals and the East High Canal Irrigation System.

These appropriations for continued development of irrigated land will help offset some of those acres that are lost annually to urbanization and will help maintain the food and fiber production that is so vital to this nation.

The development of the East High area is very important and we hope the Environmental Impact Statement is not done at a slow pace. The diminishing underground water table, coupled with high energy costs, is creating a notable hardship on the farmers in that area who have become tired of waiting for development and have gone to the deep well for their water. This depletion of the underground waters is serious and only completion of the East High System can alleviate the problem.

COLUMBIA BASIN DEVELOPMENT LEAGUE DELEGATION TO BUDGET HEARING

Victor M. Burgess	Pasco, Washington
Ervin G. Easterday	Mesa, Washington
Doyle Mathews	Pasco, Washington
Carl Terwilleger	Warden, Washington
Henry Schafer	Odessa, Washington
Russell Wentworth	Ephrata, Washington
Richard B. Stevens	Soap Lake, Washington
Thomas R. Lyda	Othello, Washington
Thomas S. Lyda	Othello, Washington

STATEMENT OF RUSSELL D. SMITH, SECRETARY-MANAGER, SOUTH COLUMBIA BASIN IRRIGATION DISTRICT

We are pleased to support the President's Budget as it relates to energy and irrigation development on the Columbia Basin Project for F. Y. 1982. We particularly support those appropriations for Third Power Plant and those items of the Irrigation Facilities including the Grand Coulee Pumping/Generating Plant Units PG 9, 10, 11 and 12, the Block 26 Lateral Distribution System, the Drainage Construction, Deferred and Supplemental Construction, Deferred and Bypassed Lands, and the East High Canal Irrigation System.

On behalf of the Board of Directors and the landowners of this District, I thank you for your past cooperation and courtesies and look forward to the ultimate completion of the Columbia Basin Project as originally conceived and authorized and reauthorized by Congress almost forty-six years ago.

ENERGY AND WATER ISSUES

STATEMENT OF PATRICK A. PARENTEAU, DIRECTOR, RESOURCES DEFENSE DIVISION, NATIONAL WILDLIFE FEDERATION

Senator KASTEN. The next witness is Mr. Patrick Parenteau, National Wildlife Federation, speaking on energy and water issues.

Mr. PARENTEAU. Thank you, Mr. Chairman. We have prepared a detailed written statement which we will submit for the record.

With me today is Connie Stevens of our staff. Over 4.5 million members nationwide support the National Wildlife Federation which is the largest grassroots organization in the country dedicated to the wise use and long-term productivity of our national resources. We welcome the opportunity to discuss the appropriations for fiscal year 1982 with the committee. Our comments are in the context of the overall budget process which is going on at the present time, as the chairman well knows.

We fully support the effort to reduce the Federal deficit spending as part of the overall economic recovery plan for the Nation.

BUDGET EQUITY AND FAIRNESS

The question is not whether to cut the budget, but where. In looking at areas to cut, we feel that there are two principles which must be kept in mind. One is the concept of equity—fairness in the cuts. Federal programs that have been developed as a careful deliberation of this body should not be offhandedly thrust aside. Disproportionate cuts in certain Federal projects or program areas should not be allowed, whereas other program areas of the budget are untouched. So equity is an important consideration in these matters.

The second consideration, I believe, is the long-term interest of the Nation. Shortsighted budget cuts can prove nonproductive in the long term and I think specifically of our effort to reduce our dependence on foreign oil and our efforts to protect the long-term productivity of our soils and our water sources.

I would like to turn to three areas of the fiscal 1982 budget and discuss in general terms, leaving the specifics to our witness statement, some of the reductions that are possible. First is the energy program. Looking first at the concept of equitable and fair cuts, what we are seeing in terms of the proposals from the administration is not equity. We see substantial, indeed near total, elimination of the Federal program of conservation and renewable resources of energy on the one hand. On the other hand, we see programs of the size of the synthetic fuels development program as virtually untouched. In other areas such as the nuclear industry, it is receiving increases.

In terms of the long-term question, these cuts are not in the best interest of the United States. Study after study has shown that the fastest, cheapest, less inflationary method of reducing dependence on foreign oil is conservation. It is a wise Federal investment. It is not wise to eliminate that investment for some short-term, cost-cutting reasons where those cost-cutting objectives can be achieved across the board in a more equitable manner.

So, we would specifically like to see the committee take a hard look at some of the proposed reductions in the conservation and renewable side of the program on the one hand, and also the lack of cuts in the synthetic fuels and nuclear programs on the other hand.

WATER RESOURCE DEVELOPMENT PROGRAM

With regard to water resources development, we see the opportunity here to reduce the Federal deficit in ways that are fair and justifiable, but we do not see that these opportunities have been fully taken advantage of. Indeed there is a net increase in spending for water project construction by the Federal Government over 1981 in the proposed 1982 budget. This is coming at a time when some of the environmental programs are suffering severe cuts, the Fish and Wildlife Service and the land and water conservation fund among others.

This is not to say that the problems which these Federal projects seek to address should not be addressed. It is to say that there are less expensive, less capital-intensive means of addressing those problems and that the attention of the Federal Government ought to be addressed to those.

LIBBY DAM ADDITIONAL UNITS, MONTANA

If I could cite a few examples of the projects that do not warrant funding that are now in the budget, I would start with the Libby reregulating dam in Montana. The proposed budget proposes to include moneys for installation of the generating units at the main dam, existing Libby Dam. Those units can never operate unless the reregulating dam is constructed downstream. The reregulating dam has never been authorized and is the subject of hearings and debate in the authorizing committee. To us it does not seem reasonable to include money in the budget to construct and modify a facility where you do not have the authority to go and invest in the necessary facility in order for those units to operate.

O'NEILL AND NORTH LOUP PROJECTS, NEBRASKA

Turning to a couple of the other projects, O'Neill and North Loup projects which are part of the Pick-Sloan program in Nebraska, here are two projects which costs, by any standard, are escalating at astounding rates. In last year alone the cost of the O'Neill unit had gone up $1 million. Overall, the cost of the completion at the moment for these projects is some $578 million. A statewide poll recently conducted in Nebraska shows the people in Nebraska are running 2 to 1 against the construction of the O'Neill unit because of the uniqueness of the river. This is certainly an area where, without construction underway, it was a considerable question about dam safety and economic net benefits the Federal Government can afford to cut.

RED RIVER WATERWAY, LA.

The third project I would mention is the Red River Waterway which the administration has proposed for elimination from the fiscal 1982 budget and I would simply say that we certainly support that.

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

The final area where I think the committee should pay particular attention is the Appalachian regional development highway. This is a $210 million item in the 1982 budget. This highway system is clearly redundant with the primary system administered by the Department of Transportation. This highway system is unnecessary. If there are needs to complete primary systems in this 11-State region it can be done by the Department of Transportation and we would recommend the elimination of the $210 million figure from the fiscal 1982 budget.

With that, Mr. Chairman, I thank you for your time and I will conclude my remarks.

Senator KASTEN. Mr. Parenteau, we thank you very much for your participation and your remarks will be inserted as a permanent part of the subcommittee record.

I might add that one of my accomplishments as a member of the State of Wisconsin Legislature a number of years ago was being named Conservation Legislator of the Year by the Wisconsin Wildlife Federation for some of my work on recycling and preservation of woodlands and wetlands in Wisconsin. So, I have a special interest in some of the issues that you have described here and we greatly appreciate your testimony.

Mr. PARENTEAU. Thank you very much, Senator.

[The statement follows:]

STATEMENT OF PATRICK A. PARENTEAU, DIRECTOR, RESOURCES DEFENSE DIVISION, NATIONAL WILDLIFE FEDERATION

On behalf of the National Wildlife Federation, representing more than 4.6 million members and supporters, I submit this statement for the record of the Subcommittee on Energy and Water Development.

ENERGY, TITLE I

NWF takes strong objection to the lack of balance in funding of energy programs in the President's budget. A much greater emphasis is placed on environmentally risky energy technologies, while those which would potentially lead the way to solving the energy/environment dilemma are placed on the back-burner. For example, the Administration's energy budget abandons constructive federal efforts in solar and conservation in order to accelerate the enormous ongoing subsidy for nuclear power and continue substantial subsidies for the synfuels industry.

We would like to make several recommendations for the energy budget which we believe would restore some of the balance of the Federal program and reshape it into an effort which is environmentally sound.

First, we urge the committee to restore essential DOE conservation and solar programs, including the solar and conservation bank, to full operational levels. The Administration's proposed budget recommendations for DOE's energy conservation programs represent a 77% reduction from levels appropriated for FY 81. Such reductions would effectively cancel major portions of the national energy strategy enacted by Congress over the last four years.

The proposed cuts in programs which are vital to the nation's energy security future are not cost-effective. These programs, unlike many of DOE's long-term R & D efforts, offer an immediate return in terms of energy saved, and of millions of barrels of oil freed for other uses in the economy. Promoting such efficiencies need not, and does not, involve curtailing the end uses to which energy is put, but it does require a constructive federal role in increasing the efficiency of energy use throughout American society.

We support a conservation budget of $700 million, allowing for a 20% reduction from the Carter Administration's request for FY 82. This would allow for the continuation of essential and highly successful federal energy conservation efforts, such as the low income weatherization program, schools and hospitals program, state conservation planning grants, appliance efficiency standards, and industrial, building and community systems, and transportation research and development.

The DOE solar program is comprised of photovoltaics, biomass, and active and passive solar systems. These programs have suffered a cumulative reduction of some 77 percent, to $193 million for FY 82. Again we recommend substantial restoration of this program.

The Administration now plans to rescind FY 81 funds for all of the DOE line-item synfuels demonstration projects except SRC II which will continue to be funded for FY 81 because of existing "international agreements." The Administration has also proposed that no money be appropriated for any of the projects in FY 82. We support the Administration's requests for these cuts. Additionally, we encourage the recission of unobligated FY 81 funds for the SRC II project. If accepted, the SRC II cut could yield savings of $162 million in FY 81 outlays.

The DOE Nuclear Budget contains funds for a variety of programs, ranging from cost-sharing research with the nuclear industry to the development of third generation technology of only speculative impact on national energy security. Many of these programs should be cut in line with the Administration's stated desire to end unnecessary federal involvement in the energy marketplace. Despite the overriding need to restrain federal spending, DOE's civilian nuclear programs (fission and fusion budgets) have received substantial increases in the latest budget revisions.

Based on a program-by-program analysis of the nuclear budget, we recommend significant cuts which include zero-budgeting the Advanced Nuclear Systems program and elimination of the Clinch River Breeder and Water Cooled Breeder programs, neither of which will have any siginificant impact on the development of world breeder technology, even if they were successfully completed.

Additionally, an equitable program of budget cuts within the DOE budget requires additional cuts in Magnetic Fusion R & D. Even with full funding of magnetic fusion, no assessment of the technology's potential impact on commercial electric generation is expected to be available prior to 1995.

WATER RESOURCES, TITLES II & III

In light of the severe budget cuts in conservation and habitat protection programs this year, we are very anxious to see this subcommittee make a commitment to cuts in the water resources development program that will encourage the conservation of valuable natural resources and wildlife habitat. This subcommittee has a great opportunity to save money and natural resources by acting in a fiscally responsible manner this year.

The National Wildlife Federation supports the following policy objectives:

- Reduced funding for flood control projects that induce the clearing of valuable habitat;
- Reduced funding for drainage and irrigation projects intended for the production of surplus or price supported crops; and
- Reduced funding for projects which do not have fish and wildlife mitigation recommendations completed by the U.S. Fish and Wildlife Service.

More specifically, the National Wildlife Federation would not support funds budgeted for the following water projects proposed by the Corps of Engineers or the Water and Power Resources Service. These projects have a direct negative impact on the environment, and have various other problems of economic feasibility and/or lack of local political support.

Tennessee-Tombigbee/Warrior-Tombigbee Waterway, Alabama and Mississippi

The Tennessee-Tombigbee Waterway has increased in cost astronomically since funding was first appropriated for construction in 1970. The scope of the project has significantly changed since the original authorization, and serious economic and environmental questions have been raised since the project's inception. The National Wildlife Federation urges that mitigation be conducted concurrent and proportionate with project construction. Also, the full costs of construction, bridge relocation, damaged water supplies, and all other costs associated with the Tennessee-Tombigbee and related projects should be fully disclosed to decisionmakers and the public in a manner appropriate to their consideration along with the irreversible commitments of natural and economic resources.

Hendry County, Central and Southern Florida Flood Control Project, Florida

The flood control project for Hendry County, Florida is the last of the old-line Everglades drainage schemes. It would drain 261 square miles of Hendry County to benefit 21 landowners, for the purpose of expanding sugar cane production and cattle feedlot operations at the headwaters of South Florida's drinking water supply. Stormwater runoff would drain into the Everglades of western Broward County carrying pesticides, herbicides, and other contaminants and encouraging algae growth. It would also encourage the drainage of wetlands and induce conversion of the naturally productive ecosystem to more intensive agricultural development. The project is opposed by the Florida Wildlife Federation and should be terminated, saving $5,152,000 in FY 82.

Richard B. Russell Dam, Georgia and South Carolina

Russell Dam, located on the Savannah River in Georgia and South Carolina, would provide hydropower during periods of peak demand only, serving no flood control or water conservation needs. It would be built on a geological fault between two large Corps lakes (Hartwell and Clarks Hill), require 59,260 acres, inundate 26,650 acres of forest and wildlife habitat, pollute downstream waters, and eliminate 29 miles of river and 50 miles of tributaries on the last undeveloped reach of the Savannah River in the Piedmont plateau. Power customers in the region will be heavily subsidized by federal taxpayers.

This project has major unknowns, including (a) its safety, (b) its downstream impacts, (c) whether it will become a pumped storage facility, (d) its mitigation plan. We recommend funding suspension until these unknowns are (a) resolved, (b) costed, (c) appropriate measures authorized, and (d) equitable repayment provisions adopted.

Barbers Point Harbor, Hawaii

Barbers Point Harbor is an $85,200,000 proposal to dig a second deep draft commercial port for Oahu. The harbor project is to be located at a private industrial park, whose owners are expected to receive a multimillion dollar windfall from coral to be dredged by the Corps in constructing the project. In the face of a reported long-term water level decline on Oahu, construction of the harbor is predicted to result in more than 3 million gallons per day of uncontrolled fresh water drainage into the ocean. Major shippers now operating through Honolulu Harbor have no interest in moving operations to Barbers Point. In light of the President's proposal to recover harbor construction and maintenance costs from user fees, the viability of the project is doubtful at best. The FY 82 request of $10 million for this project--upon which construction has not yet begun--should be rejected.

Red River Waterway, Louisiana

The Red River Waterway is a $1.7 billion navigation project on one of the most silt-laden and unstable watercourses in the country. Its principal purpose is to facilitate barge traffic between the Mississippi River and Shreveport, Louisiana, a corridor already served by rail. However, only 59% of the benefits of this costly undertaking are attributable to navigation. The General Accounting Office has found fault with other key benefits -- bank stabilization and area redevelopment -- using the Red River Waterway as an illustration of the shortcomings of the Corps' benefit-cost calculation practices. To our knowledge, no fish and wildlife mitigation plan has been approved by Congress. We strongly support the President's proposed termination of the project.

Libby Additional Units and Re-Regulation Dam, Montana

The National Wildlife Federation opposes the appropriation of any funds for the construction of a re-regulating dam on the Kootenai River in northwestern Montana, with or without the proposed additional units for the main Libby Dam. The project would destroy 10 miles of blue-ribbon trout fishing and more than 1,300 acres of winter range for elk, moose, bighorn sheep and deer, as well as habitat for bald eagles, osprey and many other wildlife species. Northwestern Montana would also lose recreation on 10 miles of free-flowing Kootenai River on top of the 90 river miles already lost due to the main Libby Dam.

The existing Libby Dam on the Kootenai River in northwest Montana was completed in 1973, after which the Corps of Engineers began to modify the dam to increase its generating capacity. This increased capacity at the main dam would produce virtually no more electricity than the existing facility, but would help meet higher daytime demand. Since peak period energy production releases water in surges, a reregulating dam was proposed 10 miles downstream to reduce water fluctuations. Total cost of the additional units and reregulating dam is $559 million, including the $14.6 million budgeted for FY 82.

The Ninth Circuit Court has denied a motion to reconsider a lower court injunction of the reregulating dam on the grounds that this portion of the project was never authorized by Congress. Yearly appropriations are being spent for the Libby Additional Units which are useless without a reregulating facility. The Corps is gambling that the sunk costs involved in the additional units will force ultimate Congressional authorization of the Reregulating Dam.

The Libby reregulating dam would allow the conversion of the main Libby Dam from a base-load facility to a peak power facility. In May, 1977, GAO released a report stating that there is no clear need for additional peak power in the Pacific Northwest. Furthermore, current plans call for marketing this power at a subsidized interest rate for computing repayment obligations. It is inappropriate and inequitable for the federal government to continue to subsidize hydroelectric energy for a region which already has an abundance of relatively inexpensive generating capacity. The project is opposed by the Montana Wildlife Federation.

Pine Ford Lake, Missouri

Half the benefits currently assigned to this economically marginal project are attributed to recreation, although abandoned lead mine sites upstream may pose toxic water quality problems in the reservoir. By letter of Dec. 17, 1979, the Missouri Department of Natural Resources has withdrawn state assurances for participation in recreation development at the project. No further funding for such a dubious project can be justified in a tight budget year.

Arkansas-Red River Basin Chloride Control Project, Oklahoma

One of the most questionable projects in the entire Corps program, the Chloride Control project would take nearly 98,000 acres in three states for the collection of three fresh water lakes, five lowhead brine collection dams, and six brine lakes. One brine lake would modify the existing Great Salt Plains Reservoir, a national wildlife refuge designated as critical habitat for the whooping crane. The project is beset by active opposition by rural landowners and is opposed by the Oklahoma Wildlife Federation. FY 82 funding of $595,000 should be eliminated.

Stonewall Jackson Dam, West Virginia

The costs of the Stonewall Jackson Dam project of the Corps of Engineers have increased dramatically over their initially authorized level, and the amount of land needed for acquisition has more than doubled. The Corps currently estimates that more than 350 families will be removed from their homes to complete the project. Forty-seven percent of the benefits accredited to this project are in water quality improvement. Legislation since authorization has discouraged this approach ("pollution dilution") to solving water quality problems. There have been significant changes in the project scope that have not been reviewed by the appropriate authorizing committees, including a change in the water supply and recreation components of the project (a decrease in water supply benefits and a concurrent increase in recreation benefits). The value of some $15 million in coal reserves to be flooded by the project has not been properly considered by the Corps in its economic analysis. Stonewall Jackson Dam is opposed by the West Virginia Wildlife Federation.

Central Arizona Project

The Central Arizona Project is a massive project planned by the Bureau of Reclamation, consisting of aquaducts, four dams, and pumping plants. It is designed primarily to get water from the Colorado River to the Tucson and Phoenix areas for municipal and industrial water supply. CAP will destroy a unique wildlife habitat along desert streamsides which support hawks, bald eagles and other wildlife species. The economic justification for the CAP, and the Orme Dam in particular, is highly in question. To get the Colorado River water all the way to the Tucson area requires pumping uphill 2,000 vertical feet. The CAP will thus consume enough electricity to support the population of a city the size of Phoenix. It is time to carefully examine both the economic and the energy costs of the CAP proposal and re-evalutate its value in light of today's energy needs and fiscal circumstances. We object to any funding for a dam at the Orme damsite, and support the orderly completion of the alternatives analysis now being done under the Central Arizona Water Control Study.

O'Neill Unit and North Loup Division, Nebraska

The O'Neill Unit and North Loup Division of the Water and Power Resources Service -- together costing $578 million -- would provide heavily subsidized irrigation in north central and central Nebraska. Both projects involve large dams and a series of canals. The projects are designed to increase agricultural production, primarily corn, at a time when the federal government is paying set-asides and price supports because the country as a whole is growing too much corn. Norden Dam, a feature of the O'Neill Unit would inundate a significant stretch of the Niobrara River valley, a unique environment where eastern western, northern and southern species can all be found.

The purpose of the two projects is to irrigate 130,000 acres of land. The federal cost for the two projects averages more than $4,285 per acre, among the very highest in the reclamation program. Both the Norden and Calamus Dams have undergone recent design changes that have resulted in major cost increases.

Taken together, the projects will add over one-half billion dollars to the repayment obligation of the Pick-Sloan Missouri Basin water and power users. The Pick-Sloan account is already in financial shambles, as revealed by the Departmental audit of July, 1978.

No further construction funds should be spent on these projects. The Niobrara River, including the portion to be otherwise inundated by O'Neill, should be recommended for inclusion in the National Wild and Scenic Rivers System. This committee should examine the implications -- possibly beneficial -- for the Pick-Sloan repayment obligation resulting from the termination and/or deauthorization of these two projects.

Garrison Diversion Unit, North Dakota

Garrison Diversion is a massive, $1 billion federal irrigation project in North Dakota. The project would violate an international treaty with Canada, cause an unprecedented destruction of national wildlife refuges and some of America's most significant wetlands, and cause damages to more farmers than it would benefit. The Garrison project is designed not to bring new land into production, but to irrigate 250,000 acres of already productive land. The canals, reservoirs, and other project features would consume almost as much productive farmland as would be irrigated. About 200,000 acres of farmland and significant wetland would be taken by the project as authorized. Construction is less than 15% complete.

Canada has firmly opposed, since the commencement of construction in the late 1960's, those aspects of the project with a potential for injurious transboundary impacts. Under the terms of the 1909 Boundary Waters Treaty, Canada and the United States agreed that ". . . waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other." In 1975, the governments of the two countries asked the International Joint Commission (IJC) to undertake an impartial investigation of the transboundary implications of the project. In 1977, the IJC reported that the project as planned would cause pollution to Canada in violation of the Boundary Waters Treaty.

The project would cause the greatest single loss of wetlands in North Dakota history and would damage or destroy 13 national wildlife refuges. The Garrison project out not be funded for FY 82.

There are a number of active projects which are NOT funded in the President's 1982 budget proposal which we would like to address as environmentally damaging and economically wasteful. We urge that no funds be added for these projects.

Appalachicola River below Jim Woodruff Dam, Florida

Despite the opposition of the Governor and the Florida Cabinet to a dam and channelization project on the Appalachicola River, the study proposal is still alive. This project is located on Florida's largest river, and would affect water quality in Florida's most productive and commercially valuable estarine system. This project proposal would increase these water quality problems and should not be pursued.

Obion Creek, West Kentucky Tributaries, Kentucky

This Corps flood control project would directly destroy approximately 1,800 acres of bottomland hardwoods and associated wildlife habitat. The reduction of waterfowl habitat would be devastating and irreplaceable. The project induces the clearing of additional bottomland hardwoods for conversion to agriculture and further development on the floodplain, contrary to Executive Order 11988. Less destructive clearing and snagging of Obion Creek can provide relief for much of the seasonal drainage problems now experienced by farmers in the area. The channelization project is opposed by the League of Kentucky Sportsmen.

Dickey-Lincoln School Lakes, Maine

The Dickey-Lincoln School Lakes project would entail severe environmental losses. It would flood 88,000 acres of timberland. It would add another still-water reservoir to an area saturated with lakes, and deprive the region of one of its last free-flowing stretches of white water for fishermen and recreationists. It has been shown that the electricity to be gained by the mammoth Dickey-Lincoln School Lakes project could be generated by smaller, less destructive hydro projects and pumped storage facilities and reduced through load management and conservation. We support the adoption of alternative measures to meet New England's energy needs and deauthorization for Dickey-Lincoln. We urge that remaining FY 81 planning funds be directed toward a review of the viability of Lincoln School Dam on its own, individual merits.

INDEPENDENT AGENCIES, TITLE IV

Appalachian Development Highway System

Under the Administration's proposal, the highway program of the Appalachian Regional Commission is recommended for transfer to DOT, fully funded, while the social development programs of the commission will be scrapped. The highway program is redundant with the federal-aid primary system. We recommend that funding for the Development Highway program be eliminated. Any essential gaps in the system can be funded out of the existing primary system apportionments of this thirteen-state region.

Delaware River Basin Commission

The commission recently approved a controversial withdrawal of up to 95 million gallons per day from the Delaware River at Point Pleasant, Pennsylvania, involving a radical change in the flow regimes of Neshaminy and Perkiomen Creeks. We urge that at least $250,000 be provided for FY 82 for the purpose of developing an Environment Impact Statement on this proposal, and that committee report language provide guidance to DRBC in the expenditure of such funds.

Columbia Dam, Tennessee

The Columbia Dam is a TVA project for regional development, recreation and water supply on the Duck River which has never had a benefit-cost ratio greater than 1 to 1. A recent exhaustive analysis of the project by the House Government Operations Committee concluded that the project is not essential and that it does not provide "a single benefit than cannot be met by an alternative (cheaper) proposal fashioned by the TVA." The dam would inundate forest and farmland along a stream of unusual beauty and biological diversity and constitute a waste of money in a state which already has 60 major impoundments. We urge that all unobligated FY 81 funds for Columbai Dam be rescinded.

KENTUCKY WATER RESOURCE PROJECTS

STATEMENT OF HON. CARL D. PERKINS, U.S. REPRESENTATIVE FROM KENTUCKY

Senator KASTEN. Now, we have a special guest, a surprise guest and it is a nice surprise, Congressman Perkins of Kentucky is here.

Congressman, if I could allow one further person to speak before you come in with your group, would you mind that? Why don't you go ahead a minute. Congressman Perkins and I had the privilege of serving together in the House of Representatives.

Mr. PERKINS. I will consume 1 minute. Then, I yield to Wayne Bromley for 1 minute to let him introduce the other people and we will be through here within 6 minutes, if that meets your approval.

PREPARED STATEMENT

Senator KASTEN. Fine. Your full statement will be made part of the record at this point.

[The statement follows:]

STATEMENT OF REPRESENTATIVE CARL D. PERKINS OF KENTUCKY

MR. PERKINS. Mr. Chairman, I appreciate the opportunity to appear before the Subcommittee today with several of the outstanding citizens of the Seventh Kentucky Congressional District.

We are not strangers in this place, because we have come here year after year in behalf of a cause that is very important to our people. That is flood protection.

Because of the nature of the terrain on the western side of the Appalachians, and the many streams that crease and wrinkle our land, we have special problems. No area of the United States is more prone to flooding, and nowhere do people live in more dread of being washed away than in the region I represent.

Unfortunately, you can't tame an entire dangerous drainage basin with a single dam or levy. You have to control many parts of the system before the whole is safe.

That is what we have been doing over the years. We have some good and effective flood protection facilities in place in the Big Sandy and its tributaries. They have done a lot of good and prevented untold millions of dollars worth of damages since they have been in place.

But other parts of the flood control program need to be built before the entire plan reaches its maximum effectiveness. The Subcommittee will readily see the economic fallacy of pinching pennies while dollars wash away.

We are here today to ask you to save millions and millions of dollars in the years ahead by appropriating a few million now to bring our flood control system into full force and effectiveness.

Last year, the Congress saw the wisdom of taking a system-wide approach to the Big Sandy basin's flood problems. It authorized a $200,000,000 program to provide flood protection to the people of the Tug and Levisa Forks of the Big Sandy and the Upper Cumberland Rivers in Kentucky, West Virginia, and Virginia.

Some $6,000,000 was appropriated to commence this long-delayed project in FY 1981.

Unaccountably, no funds were recommended in the FY 1982 budgets of either Administration for Big Sandy flood control.

The Corps of Engineers Huntington District has advised me that it would have a capability of utilizing $7,500,000 to continue engineering and studies prerequisite to construction and land acquisition in FY 1982. I include a copy of a Corps letter to be included in the Record at the end of my statement. This sum would also permit the Corps to construct segments of flood protection measures at Pikeville and South Williamson, Kentucky, and to initiate construction at Pineville, Kentucky.

I ask the Subcommittee to include the full capability sum, $7,500,000, in the Energy and Water Development Appropriations bill.

Now Mr. Chairman, I want to talk briefly about the embattled Yatesville Lake project on Big Blaine Creek, a tributary of the Big Sandy.

This flood control project was authorized by Congress 16 years ago. It was designed to reduce flood crests on the lower reaches of the Big Sandy, and to make a measurable contribution to crest reduction in the Ohio Valley.

To date, we have spent $10,970,000 on Yatesville, and the Corps has acquired 11,245 acres in 202 tracts. In FY 1981, Congress appropriated $2,000,000 to continue work after an interruption of two or three years. The previous administration recommended $6,900,000 to continue construction in FY 1982. This sum was deleted from the new Administration's recommendations.

Mr. Chairman, I urge that $6,900,000 be appropriated so we can get on with the work of completing this project. To me it is unthinkable that we waste all of the money and effort that has gone into this project -- without one nickle's worth of flood protection or anything else to show for it.

You don't have to take my word for that. With us today are several community leaders from the Lawrence County area who will tell you of the great need to complete Yatesville Lake. Not only does it offer effective flood reduction, but significant regional development as well.

No funds are included in the executive budget recommendations for another badly needed project. That is the Haysi Lake project in Dickenson County, Virginia, upstream from the many towns and communities along the Levisa Fork in Kentucky. This project would contribute materially to flood protection in my area, and I want to urge the Subcommittee to appropriate money to make a start on its construction.

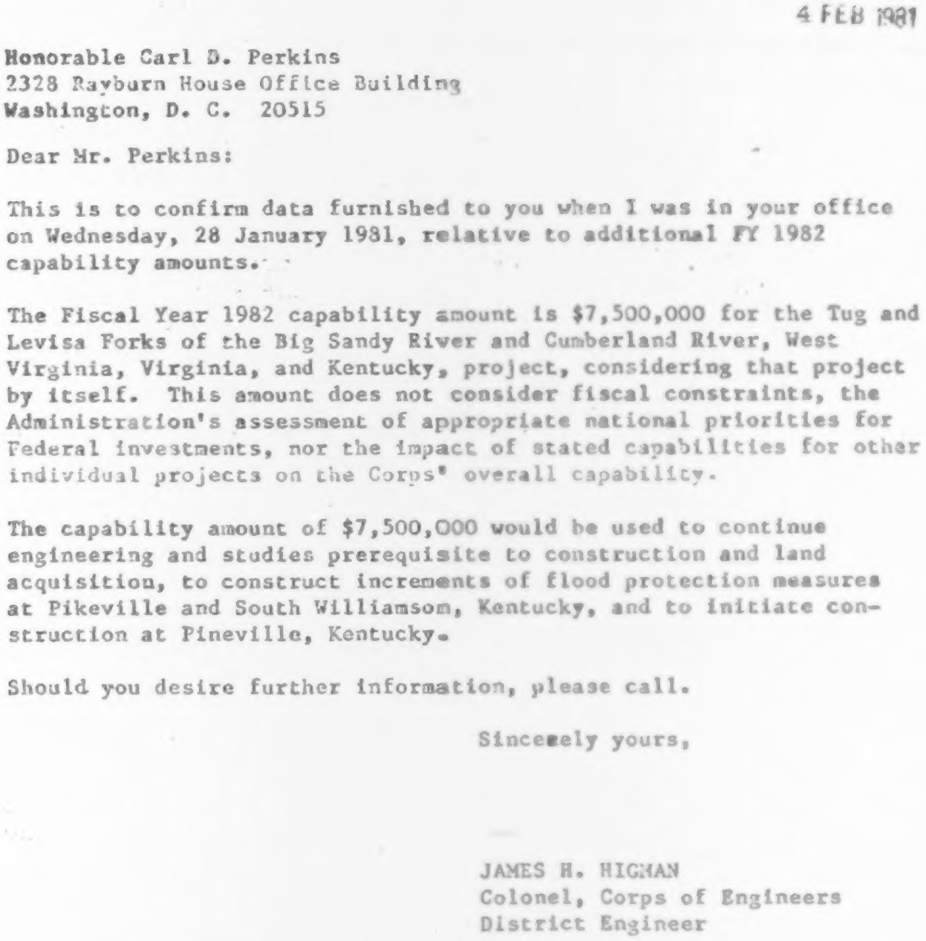
I hope that before many years the Public Works Committees of both Houses will proceed to the authorization of a reservoir on Lower Knox Creek, on the Tug Fork side of Pike County, Kentucky, to provide protection for the people in that flood ravaged region.

The Paintsville Lake project on Paint Creek in Johnson County is now pretty well along in construction.

But there is a recommendation that it be slowed down or stretched out. Construction funding for FY 1982 would be reduced. That is a dangerous gamble, in my judgment, for we are simply betting that a killer flood will not occur until the Corps completes the structure. No sane person would bet on the exact date such a flood will occur; but it is a moral certainly that it will occur sometime.

Mr. Chairman, I don't think the Congress or the Administration ought to shoot craps over something that people's lives depend upon. I hope you will move to appropriate the full capability of the Corps on this project, and get Paintsville Lake completed on schedule -- or sooner.

Thank you, Mr. Chairman.



4 FEB 1981

Honorable Carl D. Perkins
2328 Rayburn House Office Building
Washington, D. C. 20515

Dear Mr. Perkins:

This is to confirm data furnished to you when I was in your office on Wednesday, 28 January 1981, relative to additional FY 1982 capability amounts.

The Fiscal Year 1982 capability amount is $7,500,000 for the Tug and Levisa Forks of the Big Sandy River and Cumberland River, West Virginia, Virginia, and Kentucky, project, considering that project by itself. This amount does not consider fiscal constraints, the Administration's assessment of appropriate national priorities for Federal investments, nor the impact of stated capabilities for other individual projects on the Corps' overall capability.

The capability amount of $7,500,000 would be used to continue engineering and studies prerequisite to construction and land acquisition, to construct increments of flood protection measures at Pikeville and South Williamson, Kentucky, and to initiate construction at Pineville, Kentucky.

Should you desire further information, please call.

Sincerely yours,

JAMES H. HIGMAN
Colonel, Corps of Engineers
District Engineer

ADDITIONAL STATEMENTS FROM KENTUCKY DELEGATION

Senator KASTEN. Congressman Perkins, if you would withhold for just a second, Senator Huddleston, who is a member of the subcommittee, could not be here this morning. He has submitted a statement on those items of special interest to him which, without objection, will be made part of the record.

Statements have also been received from Congressmen Natcher, Hopkins, Mazzoli, Hubbard, and Snyder of Kentucky and, without objection, those will also appear in the record at this point.

[The statements follow:]

STATEMENT OF REPRESENTATIVE ROMANO L. MAZZOLI OF KENTUCKY

Mr. Chairman, I thank you and the members of the subcommittee for offering me this opportunity to apear before you today. I am pleased to testify on behalf of the southwest Jefferson County, Ky., flood protection project.

The full $14.4 million recommended by both President Ronald Reagan and former President Jimmy Carter is needed to insure timely completion of this project.

Mr. Chairman, this project—consisting of a system of earth levees, concrete floodways, and pumping plants—is designed to protect nearly 60,000 residents, 2 industrial sites, and several hundred commercial units in the area from floods which occur on an almost annual basis. Over the last 100 years, residents in the southwest Jefferson County vicinity have been victimized by Ohio River floods at least 75 times.

Local authorities have raised nearly 25 percent of the funds for this project. This demonstrates a strong local commitment. The unanimous endorsement the project has received over the years from the Kentucky congressional delegation is a further demonstration of the commitment and worthiness of this project.

In sum, Mr. Chairman, the southwest Jefferson County flood project merits continued support. And, the level of funding proposed by both the former and present administrations is appropriate and necessary.

Statement of Senator Walter D. Huddleston

Mr. Chairman, I appreciate the opportunity to present my statement in behalf of the civil works projects in Kentucky. I fully support the funds which have been recommended in the FY 82 budget submissions but I am also quite concerned about several projects which have merit and were not included in the FY 82 budget recommendations.

Tug and Levisa Forks of the Big Sandy and Upper Cumberland Rivers

Senators Byrd, Randolph, Ford and I cosponsored emergency flood control legislation for the Tug and Levisa Forks of the Big Sandy and the Cumberland River.

I don't have to remind the committee that this area of eastern Kentucky and West Virginia is among the ten hardest hit areas of the country as far as flooding is concerned. We have been working on this problem ever since I was elected to the Senate and there have been only one or two issues which have frustrated me as much as this one.

The Corps of Engineers has informed me that it has a capability of $7.5 million for work in this area in FY 82. It is my understanding that the capability amount of $7.5 million would be used to continue engineering and studies prerequisite to construction and land acquisition, to construct increments of flood protection measures at Pikeville and South Williamson, Kentucky, and to initiate construction at Pineville, Kentucky.

The first area to receive construction funds is Pineville, Kentucky. The physical setting of the city of Pineville lends itself to catastrophic consequences during large floods. The central business district and about 75 percent of the residential area of Wallsend and Pineville are virtually locked between the levee floodwall and practically vertical mountains. Once the floodgates are closed, direct escape is not possible, since water surrounds Pineville on all sides. The major evacuation route is up Pine Mountain around a narrow road, over which vehicular traffic cannot pass. Chances for tremendous loss of life due to failure of any relatively low level levee floodwall system are much greater than most other leveed areas because of population concentration and great depth of flooding. A level of protection commensurate with an extremely rare flood, such as the standard project flood, is an absolute necessity.

I have been to these flooded areas and seen firsthand the terrible devastation. The persons whose homes were ruined will spend years and thousands of dollars trying to put their lives back together. According to the Corps of Engineers, during the last six years there have been 85 floods in Kentucky causing damages amounting to over $181,850,000 and the loss of four lives.

The large number of floods, the actual damages caused by the floods, the sociological damages to persons requiring rehabilitation or relocation point up the necessity for immediate design and construction of flood control measures to prevent or reduce damage from these repeated floods.

Funds to get started on this emergency flood control work is absolutely vital and should receive the highest priority we can give.

Big South Fork National River and Recreation Area

I strongly support the $ 9.9 million budget request for this project, which will provide a unique and special recreation area that will preserve the natural beauty of the Big South Fork River and allow millions of people to visit one of the outstanding natural areas of the country.

Yatesville Lake

I request that the committee provide $4 million in the FY 82 budget to continue work on the Yatesville Lake project, which was authorized in 1966 and is about 20 percent complete. As you recall, the Appropriations Committees of the Senate and House added $2 million last year to continue work on this project.

I think it is grossly unfair to the residents of the area to allow this project to continue in a state of limbo. The land for the 2,100 acre lake has been cleared and some site preparation has taken place. This has created an intolerable situation in which area residents have lost their land, other neighbors' land values have been damaged and the whole community is caught in a bind because of the uncertainty of the federal government.

Support for the project is very strong in the area and among the Congressional delegation and I hope very much the committee will appprove the $4 million for the Corps of Engineers to continue work on this needed project.

Kentucky River and Tributaries

I also request that our committee provide full funding for continuing operation and maintenance of the Kentucky River and Tributaries locks. The budget request includes $ 1 million to be used in operating locks 1 through 4. I feel very strongly that our committee should add funds, as has been done in previous years, to keep the full system in operation. During recent years the operation and maintenance of the entire Kentucky River system, including major structural repairs, has cost on the order of $2.5 million annually.

There is a Kentucky River and Tributary study underway which is scheduled for completion in 1984. The study will evaluate flooding, water quality, commercial navigation, recreation, water supply and hydropower problem needs and potential along the Kentucky River. Colonel Thomas Nack informed me:

> "In evaluating navigation needs various alternatives will be considered ranging from a complete shutdown of existing facilities and their subsequent disposal, to construction of a new lock and dam system capable of accomodating current and expected future towing equipment and meeting contemporary navigation needs. We also intend to accomplish all environmental and sociological impact studies and all economic evaluations necessary to support a recommendation as to what should be done with the existing Kentucky River navigation system."

The governor, state legislature, elected officials and concerned citizens of the area strongly support full funding for maintaining and operating the Kentucky River system pending completion of the study.

That concludes my statement. Thank you for your consideration of Kentucky civil works needs.

Statement of Representative William H. Natcher of Kentucky

MR. CHAIRMAN, AGAIN, WE WANT YOU TO KNOW THAT WE APPRECIATE THE OPPORTUNITY TO APPEAR AT THIS TIME IN BEHALF OF THE PROJECTS FOR KENTUCKY. KENTUCKY HAS MORE MILES OF NAVIGABLE STREAMS THAN ANY STATE IN OUR ENTIRE COUNTRY WITH THE EXCEPTION OF ONE. DOWN THROUGH THE YEARS, WE HAVE SUFFERED DAMAGES FROM FLOODS AND LOSS OF LIFE. AGAIN, WITHIN THE LAST SIX MONTHS, WE HAVE HAD DAMAGES FROM FLOODING OF THE RIVERS AND SMALL STREAMS IN KENTUCKY.

IN THE BUDGET FOR FISCAL YEAR 1982, WE HAVE $14,000,000 TO CONTINUE CONSTRUCTION ON THE TAYLORSVILLE LAKE PROJECT WHICH IS LOCATED ON THE SALT RIVER ABOUT 60 MILES UPSTREAM FROM ITS CONFLUENCE WITH THE OHIO RIVER. THIS PROJECT IS LOCATED IN SPENCER COUNTY, KENTUCKY IN THE SECOND CONGRESSIONAL DISTRICT AND IS ABOUT THREE MILES EAST OF THE TOWN OF TAYLORSVILLE, KENTUCKY AND SOME 26 MILES SOUTHEAST OF THE CITY OF LOUISVILLE. THE LAKE AREA LIES IN SPENCER, ANDERSON AND NELSON COUNTIES AND WAS AUTHORIZED BY THE 1966 FLOOD CONTROL ACT. THE BENEFIT COST RATIO FOR THIS PROJECT IS 2.1 TO 1 AND SO FAR, THE ALLOCATIONS TO DATE TOTAL $55,340,000. THE AMOUNT CONTAINED IN THE BUDGET OF $14,000,000, IF APPROVED, WOULD LEAVE A BALANCE TO COMPLETE THE PROJECT AFTER FISCAL YEAR 1982, OF $32,600,000.

MR. CHAIRMAN, I BELIEVE THAT ALL OF US MUST AT THIS TIME WITH OUR OWN PROJECTS, AND IN EVERY INSTANCE POSSIBLE, MAKE REDUCTIONS IN THE BUDGET. THE REDUCTION REQUESTED ON THE $14,000,000 CONTAINED IN THE BUDGET FOR FISCAL YEAR 1982 AS YOU WELL KNOW, IS $2,100,000 AND MR. CHAIRMAN, I WOULD LIKE TO JOIN WITH YOU AND THE MEMBERS OF YOUR COMMITTEE IN RECOMMENDING THAT THIS REDUCTION BE APPROVED. THIS WOULD THEN LEAVE THE SUM OF $11,900,000 IN THE BILL FOR FISCAL YEAR 1982 TO BE USED TO CONTINUE CONSTRUCTION ON THIS PROJECT. I THEREFORE, MR. CHAIRMAN, RESPECTFULLY REQUEST THAT THE SUM OF $11,900,000 BE APPROVED FOR FISCAL YEAR 1982.

IN THE BUDGET FOR FISCAL YEAR 1982, WE HAVE THE SUM OF $460,000 TO BE USED TO CONTINUE THE STUDIES ON THE CAMP GROUND LAKE PROJECT IN THE SECOND CONGRESSIONAL DISTRICT OF KENTUCKY. THE SUM OF $300,000 FOR GENERAL INVESTIGATION AND FOR ADVANCE ENGINEERING AND DESIGN WAS APPROVED FOR FISCAL YEAR 1981 AND IN THE BUDGET FOR FISCAL YEAR 1982, WE HAVE THE SUM OF $460,000 TO BE USED IN CONTINUING PHASE I STAGE OF ADVANCE ENGINEERING AND DESIGN. IN THE FISCAL YEAR 1979 BUDGET, MR. CHAIRMAN, THE SUM OF $200,000 WAS APPROVED FOR THIS PROJECT AND PRIOR TO THAT TIME, THE SUM OF $330,000 HAD BEEN APPROVED FOR THE PROJECT.

I RESPECTFULLY REQUEST THAT THE $460,000 CARRIED IN THE BUDGET FOR FISCAL YEAR 1982 FOR THE CAMP GROUND LAKE PROJECT PHASE I STAGE OF ADVANCE ENGINEERING AND DESIGN BE APPROVED.

MR. CHAIRMAN, THE SUM OF $100,000 IS IN THE BUDGET FOR FISCAL YEAR 1982 TO CONTINUE THE STUDIES OF THE GREEN AND BARREN RIVERS. THE TOTAL ESTIMATED FEDERAL COST OF THE SURVEY STUDIES FOR THIS PROJECT IS $1,158,000 AND THE SUM ALLOCATED PRIOR TO FISCAL YEAR 1981 WAS $658,000. THE ADDITIONAL COST TO COMPLETE THIS STUDY IS $400,000. MR. CHAIRMAN, I RESPECTFULLY REQUEST THAT THE SUM OF $100,000 CARRIED IN THE BUDGET FOR THE GREEN AND BARREN RIVERS STUDY BE APPROVED.

MR. CHAIRMAN, I JOIN WITH ALL OF MY COLLEAGUES FROM KENTUCKY IN THE HOUSE AND IN THE SENATE IN THEIR REQUESTS FOR THEIR STATE AND THEIR DISTRICTS. AGAIN, I WANT YOU TO KNOW THAT I APPRECIATE THE OPPORTUNITY TO APPEAR AT THIS TIME IN BEHALF OF THE TAYLORSVILLE LAKE PROJECT, THE CAMP GROUND LAKE PROJECT AND THE GREEN AND BARREN RIVERS STUDY. I WANT TO THANK YOU AND THE MEMBERS OF YOUR COMMITTEE FOR YOUR SUPPORT AND ASSISTANCE ALL DOWN THROUGH THE YEARS.

STATEMENT OF REPRESENTATIVE LARRY J. HOPKINS OF KENTUCKY

I am writing to discuss the budget requests for Kentucky's civil works projects for Fiscal Year 1982, and would appreciate your including my statement in the hearing record.

There are two requests in the Civil Works Budget Request of the Army Corps of Engineers which specifically affect the Sixth Congressional District, and I will direct my comments to those.

The first of these requests, in the amount of $300,000, would continue the Kentucky River and Tributaries flood control study. As you know, I have closely monitored the progress and results of the flood control study for which funding was resumed after the devastating floods in the area, in 1978. I believe continuation of this study is in the interests of the residents of the Kentucky River Basin, and would encourage the Appropriations Committee to approve this request. The Corps has made good progress in pursuing the avenues available for flood control, and I feel the plans they have outlined for the time period contained in FY 1982 will bring a prompt completion of the necessary studies. I am concerned about the safety of the residents in the Kentucky River Basin area, and the most feasible option should be identified in the very near future. At that point, construction should be initiated immediately.

The Corps has also requested funds, in the amount of $1,000,000 to continue operation and maintenance of the lock and dam system along the Kentucky River. I am aware that this request will be sufficient to operate only the first four locks in the system of fourteen, and because of the results of a public hearing on this issue last year, I feel it would be in the best interests of the Corps to continue to operate the entire system.

This same dilemma arose last year, when the Corps did not intend to operate the last locks on the River, and at that time, I stated my opposition to closing locks 5-14 until studies on the River had been completed. According to the Corps' own information, the effects of keeping these locks in "caretaker" status for the long term has not yet been determined.

I would appreciate the Subcommittee's cooperation in providing an additional $1.8 million, which should be specifically "earmarked" for the purpose of operating Locks 5-14 on the Kentucky River, until long term effects of closing those locks has been determined.

Thank you very much.

STATEMENT OF REPRESENTATIVE CARROLL HUBBARD OF KENTUCKY

Mr. Chairman, I appreciate the opportunity to appear today before this distinguished panel along with my colleagues from the Commonwealth of Kentucky. Let me also express my appreciation to my good friend and distinguished colleague from the Second District, Congressman Bill Natcher, for once again arranging this opportunity for the Kentucky Delegation to testify in behalf of our Kentucky projects.

Mr. Chairman, my remarks today will be brief but sincere. I wish to speak in support of the inclusion of approximately $6.7 million in the Fiscal Year 1982 budget for four (4) projects affecting my district.

First, I respectfully urge the inclusion of the full $4,135,000 requested by the Administration for the operation and maintenance of Barkley Dam. This multipurpose project, located in Livingston, Lyon and Trigg Counties, Kentucky, and Stewart, Montgomery and Cheatham Counties, Tennessee, includes recreation areas, commercial marinas, camp and picnic sites. The power plant produced more than 840 million kilowatt-hours (KWH) of power in Fiscal Year 1980. You can see its importance to the energy needs of our country.

Next, the Administration has requested $297,000 for Hickman Harbor, Hickman, Kentucky. The present water front of Hickman is the specific area of interest. It serves as an outlet for Obion Creek and Bayou Du Chien into the

Mississippi River. This outlet was improved to form a harbor under section 107 of the River and Harbor Act of 1960. It was completed in January of 1963. Local interests in Fulton County, Kentucky and Lake County, Tennessee, have expressed a need for additional harbor facilities and flood-free water-front land to meet the demands of expanding economic activity and new industry moving into the area. I respectfully urge the inclusion of this funding.

Finally, I direct my remarks toward two (2) projects, the Uniontown Locks and Dam and the Smithland Locks and Dam. The Uniontown project is about 98 percent complete and fully operational. Remaining work involves real estate acquisitions, an addition to the service building, and recreation facilities. It is my understanding that the Administration has provided for $1,014,000 in construction funds to be included in the FY 82 budget. I respectfully urge the inclusion of this funding.

The Smithland Locks and Dam project is about 92 percent complete. The Administration has requested $1.3 million in construction funding. I respectfully urge the inclusion of the full amount requested in the Fiscal Year 1982 budget.

In conclusion, Mr. Chairman, let me repeat my support for the acceptance of the funding requested for these projects.

Thank you, Mr. Chairman.

STATEMENT OF REPRESENTATIVE GENE SNYDER OF KENTUCKY

Mr. Chairman; Distinguished Members of the Subcommittee; I am please to once again join my Colleagues from Kentucky in front of you to direct your attention to the projects which mean so much to the citizens we represent.

I do appreciate your making this time available. I know you have a busy schedule this time of year, and since you are already familiar with the two projects in the Fourth District of Kentucky, I won't take much of your time.

SOUTHWESTERN JEFFERSON COUNTY FLOODWALL

The Southwest Jefferson County Floodwall project is a system of earth levees, concrete floodwalls, pumping plants and related items designed to protect 32 square miles of flood plain--some 24,100 acres in Jefferson County, Kentucky. This property is currently valued at over a billion dollars ($1.3 billion at 1980 values).

The total estimated cost of the project is $76,190,000 with the Federal share being $66.6 million. The remaining benefit/remaining cost ratio is 4.5 to 1.

To date, over $25 million has been allocated. 14.4 million dollars is being requested for continuation of the construction in fiscal 1982.

It is a valuable project--the annual benefits are estimated to be in the neighborhood of $7.1 million.

DAYTON FLOODWALL

The Dayton Floodwall Project is located in Campbell County, Kentucky and will consist of 1.6 miles of earthen levees, two pumping plants and related items designed to protect the 140 acres of flood plain which make up nearly one fifth of the City of Dayton.

This project was first authorized by Congress in 1938 and it has seen more than its share of delays, problems and hit lists, but we broke the ground for actual construction in 1978 and it is now progressing nicely and is expected to be completed next year. When it is, it will serve as a testimonial to what can be accomplished through the perseverance of local citizens, officials and Federal cooperation. The citizens of Dayton have worked and waited a long time for this one. We owe it to them.

The project has an estimated completion date of December, 1982, at an estimated total cost of $14,863,000 of which the Federal share will be $12,820,000--12.4 million of which has already been allocated. The $380,000 included in the 1982 Budget request will see this project through to completion. It is interesting to note that the Federal cost for this project has actually decreased over a million and a half dollars since the Corps submitted its last estimate to Congress. Of the five million dollars provided for in this project in this year's budget--the '81 budget--$1,150,000 was assigned as savings and $975,000 was transferred from the project.

It is a valuable project; a necessary project for the people of Dayton--one they have waited 43 years to materialize--and I urge your support for its successful completion.

Neither of these projects endangers any endangerd species and both will provide a welcome reprieve from the periodic whims of the Ohio River which in the past have made life so interesting--but mighty soggy--in the [illegible] communities.

You have seen fit to approve both projects in the past and my constituents and I appreciate it, and we urge you to do the same again for fiscal '82.

Just in passing, I would also like to reaffirm my support for the continuation of the Ohio River Main Stem Study and particularly the continuation of funding for the specific study for flood control at Rosedale Park and Latonia, Kentucky which was added to the Main Stem Study last year.

Currently, the Rosedale Park and Latonia areas near Covington are subject to periodic flooding. In 1955, the Corps completed a local flood protection project adjoining this area. While the project has to date prevented approximately $1.3 million in damages, flood losses continue to be sustained near the project.

The study will take a total of three years---to be completed in 1983. Last year you were kind enough to provide $100,000 to initiate the study. For fiscal '82, the request is for $200,000. I would appreciate your favorable consideration again this year.

Again, I thank you for the time you have given me and the consideration you have given, and will give, to the needs of the citizens I have the honor of representing.

Thank you.

LEVISA AND TUG FORK OF THE BIG SANDY AND CUMBERLAND RIVERS, KY, VA., AND W. VA.

Mr. PERKINS. Let me state that no area in America has suffered as much from disasterous floods as eastern Kentucky. I have been working on this problem since 1957 and then that was the greatest flood. Another one in 1963 and then the great flood of 1977 on the Big Sandy.

Senator Byrd, Senator Huddleston, along with the Members of the House got our authorization through the Congress last year. It provided $200 million for the Big Sandy and the appropriation of $6 million. We need more money than that for fiscal 1982. The Corps of Engineers—and I have attached a letter from the Corps—states that they have the capability figure for $7.5 million to buy support on the Big Sandy to further study some alternate flood control plans, to come up with another solution. They recommend a reservoir in the lower Knox Creek area, perhaps one in Haysi. I don't know what they will recommend. But we need that much more additional money, $7.5 million for the upper Big Sandy.

YATESVILLE LAKE, KY.

Then there is Yatesville Lake on Big Blaine Creek where we have a late start flood control project. We have spent $11 million on construction. Unfortunately, it got on the Carter hit list and then it got off. And they put $2 million in there last year of which most has been already contracted out. And in the budget for this next fiscal year—it includes $6.9 million. It somehow got deleted again. I don't think the environmentalists got to this administration, but somehow it was not included. But it is one of the most needed reservoirs in America. It keeps water out—well, the 1978 flood got over the flood walls. And then with this, it will reduce the flooding in that area; approximately 1½ feet.

Furthermore, these people have suffered many millions of dollars in damages. The reservoir needs to be constructed.

Mr. Bromley, you call your whole delegation.

YATESVILLE LAKE, KY.

STATEMENT OF WAYNE L. BROMLEY, CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER, FIRST NATIONAL BANK OF LOUISA, KY.

Mr. BROMLEY. I am Wayne Bromley, chairman of the board, chief executive officer of the First National Bank of Louisa, Ky. I have a statement I would like to have inserted in the record.

Senator KASTEN. Without objection, it will appear following your oral remarks.

Mr. BROMLEY. We are in the awkward position, I think we all are, for cutting Government spending, but with the old addage, "We need cuts but don't cut us." We feel that it is completely justified, though, Mr. Chairman, in the fact that there has been $13 million already spent. There have been some 14,000 acres, approximately 16,000, already acquired by the Government, and there have been over 100 families displaced. So, therefore, we feel that it would be a completely unthinkable thing to stop the project at this point.

Mr. Chairman, I would like to call on some of our delegation and ask them to speak for about 30 seconds each. Mr. Gene Ervin, editor of the Big Sandy News, our weekly newspaper.

Mr. ERVIN. Mr. Chairman, thank you very much. I would like to say that the people—there have been 246 families that have been uprooted to date in the purchase of these more than 13,000 acres. A lot of these people have lived in there, have family roots for 100 years. They felt like, we are going to be disrupted by that history, but we are going to do it for a good purpose. All of this area has been declared no-man's land and for how long? Is it going to be, if it is not flooded this year, flooded next year? It is our understanding it will take 10 years to get back to the private sector again. So what is to happen to all of these acres? Is it going to be a burden to the county instead of producing jobs that has an unemployment rate of about 11 percent, but it has been as high as 16 percent.

Thank you very much.

Senator KASTEN. Before you begin, I would ask you introduce one further member of this delegation. The committee hearing is scheduled to be over at 11 o'clock. There is one witness that has not had an opportunity to speak and we allowed you to speak in front of him. We would like very much to know the names of the people and provide any kind of information, because I know that the Committee is interested in this issue. But, if you could choose one further person to speak for less than a minute, then we will have to proceed with our final scheduled witness.

Mr. ERVIN. I would like to file this.

Senator KASTEN. Without objection.

I would ask any of you who wish to provide statements for the record to do so. They will appear at the appropriate place.

Mr. BROMLEY. With that understanding, Mr. Krosher, who is administrator of the Louisa Community Hospital.

Senator KASTEN. Mr. Krosher.

Mr. KROSHER. Mr. Chairman, we appreciate greatly your giving us this opportunity. I am a relative newcomer to the area being there only 3½ years. I am president of the local Rotary Club and administrator of the Louisa Community Hospital. The need in our area for employment is tremendous. We have one of the largest unemployment rates in our area. We need the help and developing of this reservoir, will be one of those things. I am a conservationist. One thing that troubles me and was the news report just this past week that there is approximately 250 acres per day going out under hard surfaces of subdivisions, shopping plazas, highway construction. I see no attempts being made to retain water runoff from the majority of these things. I would certainly like to call this to everyone's attention, that the more blacktop we put down, the more that river is going to flood, or any other stream. In our particular area, we are between very narrow hills and on back up Louisa, and the Tub Forks. We need every effort that we can to retain that water in these areas rather than to allow it to flood on down and carry the silt and everything. Another report I understood was that the Mississippi is trying to change its course. That is a lot of that silt that is coming from our area, I am afraid.

Thank you very much.

Senator KASTEN. Thank you very much. I am sorry that we are unable to accommodate you within the constraints of time. We appreciate Congressman Perkins being here and in the interest of all of the members of this delegation and once more, let me repeat, that any comments you have will be made part of the record. We thank you very much for being here this morning.

[The statements follow:]

STATEMENT OF WAYNE L. BROMLEY, LOUISA, KY.

WE WOULD LIKE TO THANK YOU AND THE COMMITTEE FOR AGAIN AFFORDING US THE OPPORTUNITY TO PRESENT OUR VIEW IN SUPPORT OF THE YATESVILLE DAM PROJECT.

MY NAME IS WAYNE L. BROMLEY. MY HOME IS LOUISA, LAWRENCE COUNTY, KENTUCKY. I AM THE CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER OF THE FIRST NATIONAL BANK OF LOUISA. WITH ME TODAY IS A GROUP ALL VITALLY INTERESTED IN AND STRONGLY SUPPORTING THE INCLUSION OF THE YATESVILLE DAM AND RESERVOIR PROJECT IN THE PUBLIC WORKS APPROPRIATION FOR FISCAL YEAR 1982.

WE ARE GRATEFUL FOR THE SUPPORT YOU HAVE GIVEN US IN THE PAST. EVEN THOUGH I REALIZE THAT YOU ARE FAMILAR WITH THIS PROJECT, IF YOU WILL BEAR WITH ME, I WOULD LIKE TO BRIEFLY REFRESH YOUR MEMORY AS TO WHAT HAS TAKEN PLACE, DISCUSS LOCAL CONDITIONS AND CONVEY TO YOU THE FUTURE RAMIFICATIONS OF THIS PROJECT.

THE YATESVILLE DAM PROJECT HAS BEEN CONSIDERED AND DISCUSSED FOR ALMOST 50 YEARS. BEGINNING WITH PRESIDENT TRUMAN, 6 PRESIDENTS OF THE UNITED STATES HAVE FULLY SUPPORTED AND ENDORSED THIS PROJECT. PRESIDENT CARTER OPPOSED THE PROJECT FOR 3 YEARS BEFORE AGREEING TO LAST YEARS $2,000,000.00 APPROPRIATION. THE CARTER BUDGET SUBMITTED TO YOU IN JANUARY, PRIOR TO PRESIDENT CARTER LEAVING OFFICE, CONTAINED PROVISIONS FOR 6.9M FOR FISCAL '82. WE UNDERSTAND THAT PRESIDENT REGAN FAILED TO RECOMMEND FUNDS IN THE PRESENT BUDGET WHICH YOU ARE AT PRESENT CONSIDERING. SEVEN UNITED STATES SENATORS FROM KENTUCKY HAVE URGED THAT IT BE CONSTRUCTED. CONGRESSMAN CARL PERKINS, OUR REPRESENTATIVE IN THE HOUSE OF REPRESENTATIVES SINCE JANUARY, 1949, HAS BEEN THE PROJECT'S STRONGEST SUPPORTER. WHILE WE APPLAUDE THE EFFORTS OF PRESIDENT REGAN TO BALANCE THE BUDGET, WE FEEL THAT HIS DECISION TO ELIMINATE FUNDS FOR THIS PROJECT IS ILL ADVISED.

PLEASE BE AWARE OF THE FOLLOWING:

1. OVER $13,000,000.00 OR APPROXIMATELY 1/5th OF THE TOTAL ESTIMATED COST HAS ALREADY BEEN SPENT.
2. OF THE 16,700 ACRES NEEDED FOR THIS PROJECT, OVER 14,000 ACRES OR APPROXIMATELY 80% HAS BEEN ACQUIRED BY THE FEDERAL GOVERNMENT.
3. OVER 112 FAMILIES HAVE ALREADY BEEN DISLOCATED.

TO ABANDON THIS PROJECT AT THIS STAGE WOULD BE UNTHINKABLE!

FLOOD CONTROL

FLOODING HAS ALWAYS BEEN A PROBLEM TO THIS AREA. THREE YEARS AGO, I ENTERED INTO THE RECORD AN ARTICLE FROM THE FEBRUARY 2, 1976, ADDITION OF THE LOUISVILLE COURIER JOURNAL, WHICH DISCUSSED FLOODING ON BLAINE CREEK IN 1790. BLAINE CREEK IS THE MAIN SOURCE OF WATER WHICH WILL SERVICE YATESVILLE LAKE. IT IS 99 MILES LONG, LACKING ONE MILE OF BEING A RIVER. AT CERTAIN TIMES OF THE YEAR, IT RAGES THROUGH OUR COUNTY, LEAVING DEATH AND COMPLETE DEVASTATION. COMPLETION OF THE YATESVILLE DAM PROJECT WOULD PUT AN END TO THIS CONSTANT THREAT.

THE TUG RIVER FORK OF THE BIG SANDY RIVER MEETS THE LEVISA RIVER FORK AT LOUISA TO FORM THE BIG SANDY RIVER, WHICH IN TURN, EMPTIES INTO THE OHIO RIVER AT CATLETTSBURG --------- A DISTANCE OF SOME 25 MILES. THE RAVAGES OF THE FORKS OF THE BIG SANDY RIVER ARE DEVASTATING ENOUGH WITHOUT THE ADDED MENACE OF BLAINE CREEK. WITH THE YATESVILLE PROJECT A REALITY, BLAINE CREEK WOULD NO LONGER CONTRIBUTE TO THE DOWNRIVER HAVOC OF CITIES SUCH AS CATLETTSBURG, ASHLAND, GREENUP, IRONTON, PORTSMOUTH, LOUISVILLE, CINCINNATI AND MANY OTHERS.

RECREATION

A RECREATION COST SHARING CONTRACT WITH THE COMMONWEALTH OF KENTUCKY WAS APPROVED BY THE SECRETARY OF THE ARMY ON MAY 8, 1973. THE ASSURANCES REQUIRED BY SECTION 221 OF PUBLIC LAW 91-611 WERE PROVIDED BY THE COMMONWEALTH OF KENTUCKY AND APPROVED BY O.C.E. ON JUNE 6, 1973.

THE INITIAL ANNUAL ATTENDANCE IS ESTIMATED TO BE 427,000 VISITORS INITIALLY AND 770,000 VISITORS ULTIMATELY. NEED I SAY WHAT THESE VISITORS WILL CONTRIBUTE TO THE ECONOMY OF LAWRENCE COUNTY? YATESVILLE LAKE WILL BE LESS THAN TWO HUNDRED (200) MILES FROM THE CITIES OF COLUMBUS, OHIO AND LEXINGTON, KENTUCKY: LESS THAN ONE HUNDRED (100) MILES FROM CHARLESTON AND HUNTINGTON, WEST VIRGINIA: ALSO FROM IRONTON AND PORTSMOUTH, OHIO, AND WILL PROVIDE RECREATION FOR THE WHOLE TRI-STATE AREA OF KENTUCKY, WEST VIRGINIA AND OHIO.

PROPOSED RECREATIONAL SERVICES ARE THOSE OF GENERAL RECREATION INCLUDING PICNICKING, SWIMMING, CAMPING, PLEASURE BOATING, HIKING, SIGHTSEEING, FISHING AND WILDLIFE.

THE COMMONWEALTH OF KENTUCKY WILL DEVELOP THIS AREA INTO ITS WELL RUN STATE PARK SYSTEM. YATESVILLE LAKE WILL ONLY BE SURPASSED IN USAGE BY BARKLEY LAKE, NAMED IN HONOR OF YOUR FORMER COLLEAGUE AND KENTUCKY'S SON, THE LAKE VICE PRESIDENT ALBEN W. BARKLEY.

IT IS ESTIMATED THAT VISITORS TO THESE YATESVILLE LAKE FACILITIES WILL CONTRIBUTE OVER TEN MILLION DOLLARS ANNUALLY TO THE LOCAL ECONOMY.

ENVIRONMENTAL

IT IS WELL RECOGNIZED THAT WE ARE BECOMING MORE AWARE DAILY OF BOTH WATER SUPPLY AND WATER QUALITY. THE MORE SUSSTANTIVE BENEFICIAL ENVIRONMENTAL CONTRIBUTIONS OF THE YATESVILLE LAKE PROJECT HAVE NEVER BEEN ADEQUATELY REFLECTED. ONE SUCH BENEFICIAL CONTRIBUTION WILL DERIVE FROM THE WATER QUALITY CONTROL FUNCTION OF THE PROJECT WHICH WILL ENHANCE WATER QUALITY CONDITIONS DURING LOW FLOW PERIODS ALONG BLAINE CREEK, THE BIG SANDY, AND THE OHIO RIVERS. IT IS ESTIMATED THAT INDUSTRY WILL INCREASE DRASTICALLY IN THE DIRECTION OF LAWRENCE COUNTY ALONG THE BIG SANDY RIVER. INDUSTRY IS ENTICED BY THE LOCATION OF THE RIVER AND THE PROXIMITY OF U. S. 23 AND THE C&O RAILROAD FACILITIES.

AS CONCERN INCREASES REGARDING NON-POINT SOURCE POLLUTION AND THE GROWING COST FOR ADVANCED WASTE TREATMENT FACILITIES FOR POINT SOURCE POLLUTANTS, THE IMPORTANCE OF SUSTAINED MINIMUM RELEASES IN AMELIORATING THE CONCERN BECOMES ALL THE GREATER.

IN ADDITION, THE FISH AND WILDLIFE MANAGEMENT AND TIMBER MANAGEMENT PLANS GO BEYOND MITIGATION OF, OR COMPENSATION FOR, ANY POTENTIAL ADVERSE IMPACTS. PLACING PROJECT LANDS INTO PUBLIC OWNERSHIP WILL ALLOW THESE PLANS TO ENSURE ENHANCEMENT OF HABITAT AND PERPETUAL STEWARDSHIP OF LAND AND WIL LIFE RESOURCES.

ECONOMIC

LAWRENCE COUNTY LOST ITS LARGEST INDUSTRY, THE LOUISA CARPET MILL, WHICH EMPLOYED APPROXIMATELY 300 IN 1978. DUE TO ENVIRONMENTAL RESTRICTIONS,EASTERN KENTUCKY COAL PRODUCTIVITY IS AT A LOW EBB. UNEMPLOYMENT FOR THE MONTH OF JANUARY REACHED 15.9% --------FAR ABOVE THE NATIONAL NORM. THE IMMEDIATE ECONOMIC IMPACT OF CONSTRUCTION WILL PROVIDE OUR AREA WITH 137 JOBS WHICH, DURING THE 3 YEAR CONSTRUCTION PERIOD, MEAN $30,000.00 TO THE ECONOMY. THE LASTING IMPACT CANNOT BE MEASURED.

SUMMARY

THE BENEFIT-COST RATIO, AS IT HAS BEEN APPLIED IN THE PAST, CANNOT ADEQUATELY AND CORRECTLY REFLECT THE TRUE BENEFIT TO OUR AREA. WE FEEL THAT ANY ONE OF THE FOREGOING: i.e., FLOOD CONTROL, ENVIRONMENTAL, RECREATIONAL OR ECONOMIC JUSTIFICATION, STANDING ALONE, SHOULD ENSURE THAT YATESVILLE BE INCLUDED THIS YEAR.

THANK YOU FOR YOUR ATTENTION. WE IMPLORE YOU TO GIVE THIS PROJECT YOUR FAVORABLE CONSIDERATION.

STATEMENT OF G. K. HARMON, KENTUCKY

In regard to the Yayesville Dam Project that has been denied funding,would like to say that as so much money has already been spent in the acquisition of the lands adjacent to this much needed FLOOD CONTROL PRODJECT that it would be unthinkabe for the dam to now be denied sufficient funds to bring it to a reality.

As a 95 year old man that is descended from the pioneer Harmans that came from Germany in 1700,first settling near Philadelphia in the early years of that Century,later migrating to the early Virginias,where they helped settle the region and were the opponents of the Indians who were in control of a vast region of that area at that time. They built a block House near the mouth of John's Creek in Floyd County Kentucky (which was then part of Virginia) and by so doing made a safe refuge for the settlers to flee to when threatened by the Idians.

I was born on Blaine Creek about one and one hal mile from Fallsburg on January 29,1883 and resided on the farm on which I was born until I reached the age of maturity. Knowing Blaine as I do and watching the flood waters running from top of one bank to the top of the opposit bank,I can say definately that this dam above Yatesville should be built as speedily as possible,for as blaine lacks but one mile of being a river itself,it has such a large drainage area that it pours into Big Sandy River such a volume of water that it is responsible for a great portion of the damage to the Cities of Catlettsburg,Ashland,Greenup,Vanceburg and the other Cities along the reaches of the Ohio River.

The construction of the Yatesville dam will also provide much needed jobs to a great number of persons who are in need of such employment and will create a great tourist attraction to this area and will be a boon of great magnitude to the Counties through which the Blaine creek flows.

Nothing can be said in opposition to this needed project that should influence it's cancellation,for it is needed and will benefit thousands on top of thousands of Kentuckians as well as West Virginia and Ohio.

Thanking you for your favorable consideration of this vital project, I wish to subscribe my self as

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STATEMENT OF EDITH B. HALL, MEMBER, LOUISA (KY.) CITY COUNCIL

My interest in the Yatesville Dam Project branches in many directions. Each of which I believe would benefit from the completion of the Yatesville Project.

Flood control is of utmost importance to our area as we live in a flood plain of hills and valleys. So many of the hills of Eastern Kentucky are rocky and barren because of forest fires, poor farming practices and strip mining. There is nothing to absorb the water nor to slow its movement as it drains downhill. The frequent high waters and occassional major floods hinder people from traveling to and from their places of employment, cause crop damage and affect school attendance.

The county consolidated schools are located in Louisa, about ninety-eight per cent of the students are bused from rural areas. Many of these students must cross streams to reach a bus stop. Heavy rainfall causes these streams to quickly overflow onto roads that then become impassable. As a high school teacher, I am greatly concerned with absenteeism that results from this. Sometimes students must be transported to their homes during school hours due to sudden rise of the waters.

Another benefit of this project for the youth would be the development of recreational areas. We have so little to offer our youth beyond school activities that the after school hours for so many is a choice between television and street corner gatherings. Those who complete high school mostly leave our community. About thirty-per cent of our high school graduates enter college. Their talents then are taken to other areas because few return to an area that holds so little for them. A large number of those who do not finish high school turn to drugs and become problems of our community. This greatly concerns me as a high school teacher, a mother of teenagers, and as a member of City Council.

Jobs created by the Yatesville Dam would no doubt have a great financial impact upon Louisa through rising employment and trade in our local businesses.

I'm sure each of you are aware of the economic and social disadvantages of our area. But unless you have been a part of such an area, I do not believe you could know the frustrations and sadness felt by those who step forward to contribute their talents towards seeking and obtaining solutions that would change the present disadvantages we share.

Frustration is ever present because we lack financial means to develop opportunities for our people and because avenues leading to help are so constantly closed. Frustration mounts and sadness results as we take stock of resources we have and yet cannot develop for the good of the majority.

If your committee sees fit to approve this project the benefits will be many.

STATEMENT OF RANDY HUTCHINSON, LAWRENCE COUNTY, KY.

THANK YOU FOR GRANTING US THE TIME TO APPEAL TO YOU FOR SUPPORT OF THE YATESVILLE DAM PROJECT.

MY NAME IS RANDY HUTCHINSON AND I LIVE IN LAWRENCE COUNTY KENTUCKY BETWEEN THE TOWNS OF LOUISA AND BLAINE. AS A LAWRENCE COUNTIAL, I WHOLEHEARTEDLY SUPPORT THE YATESVILLE DAM PROJECT. FOR AS LONG AS I CAN REMEMBER, I HAVE HEARD OF THE YATESVILLE RESERVOIR. I HAVE NO DOUBT THAT ONE DAY THIS PROJECT WILL BE A REALITY. THE ONLY QUESTION IS, WHEN? I STRONGLY URGE YOU TO CONSIDER THIS PROJECT FOR IMMEDIATE FUNDING.

AS MY FRIEND MR. BROMLEY HAS ALREADY POINTED OUT THE FACTS AND FIGURES OF THIS PROJECT, I WOULD LIKE TO RELATE TO YOU HOW MANY OF MY FRIENDS VIEW THIS PROJECT.

FLOOD CONTROL

EACH SPRING, OUR AREA IS BESEIGED WITH FLOODS THAT DESTROY MILLIONS OF DOLLARS WORTH OF PROPERTY. AT THIS POINT, THE FEDERAL GOVERNMENT STEPS IN AND OFFERS DISASTER ASSISTANCE. WITH THE YATESVILLE DAM PROJECT THE GOVERNMENT COULD SAVE CONSIDERABLE MONEY AS WELL AS RELIEVING THE EMOTIONAL HARDSHIP ON ITS CITIZENS WHO LIVE IN THIS AREA, AS WELL AS THOSE PERSONS LIVING CONSIDERABLY DOWNSTREAM.

ECONOMIC CONDITIONS

LAWRENCE COUNTY IS SITUATED IN THE HEART OF APPALACHIA. UNEMPLOYMENT IS AT 16% AND THE WELFARE ROLL IS SWELLING. OUR PRESIDENT WAS ELECTED TO TRY AND CONTROL THESE PROBLEMS. PRESIDENT REGAN HAS STATED THAT HIS PROGRAMS ARE DESIGNED TO HELP THOSE IN TRUE NEED HELP THEMSELVES. WITH THE CONSTRUCTION OF THE YATESVILLE DAM PROJECT, THE ECONOMIC IMPACT WOULD BE GREATLY FELT FROM NOW ON. THE COST - BENEFIT RATIO COULD NOT ADEQUATELY REFLECT THE ECONOMIC IMPACT ON OUR COUNTY AND ON OUR BUSINESS COMMUNITY.

RECREATION

THE HISTROY OF LAWRENCE COUNTY AND NORTH EASTERN KENTUCKY IS PROUD. IN THIS AREA A MAJOR EMPHASIS IS PLACED ON THE FAMILY UNIT. CAMPING, HUNTING AND FISHING SERVE AS A CENTER FOR THE FAMILY RECREATION.

THE COMMONWEALTH OF KENTUCKY, UPON COMPLETION OF THIS PROJECT, HAS ALREADY COMMITTED TO DEVELOPING THIS AREA INTO A WELL RUN STATE PARK. THIS FACILITY WOULD NOT ONLY SERVICE NORTH EASTERN KENTUCKY BUT PROVIDE A SERVICE TO WEST VIRGINIA AND OHIO.

FOR MANY YEARS, OUR YOUNG PEOPLE HAVE LEFT THIS AREA FOR MORE INDUSTRIALIZED AREAS. THIS TREND IS NOW REVERSING AND OUR YOUNG PEOPLE ARE STAYING HERE TO HOPEFULLY FIND WORK IN THE COAL FIELDS. WE ARE IN NEED OF RECREATION FOR THIS GENERATION THAT IS CLOSE TO HOME.

SUMMARY

I HAVE TRIED TO HIT THE HIGH POINTS OF THE FLOOD CONTROL, ECONOMIC AND RECREATIONAL POINTS AS TO WHY WE NEED THE YATESVILLE DAM PROJECT IN LAWRENCE COUNTY.

THANK YOU FOR THIS OPPORTUNITY TO ADDRESS YOU AND MAY I LEAVE YOU WITH ONE POINT: PLEASE HELP US SO WE CAN HELP OURSELVES AND HELP OTHERS IN THE FUTURE!

STATEMENT OF E. W. VAN HOUSE, MAYOR, LOUISA, KY.

We the membersof the City Council of Louisa, wish to submit a request for further committee review of the Yatesville Dam Project. In many ways this project would have a positive impact upon our city.

Flood control for our area is a primary concern of this council. Secondary roads are often blocked by high waters as the small streams quickly fill and overflow with run-off from the hilly terrain of this area. Less often, but still a constant threat are major floods that displace families and cause damage to homes, crops, businesses and schools.

This project would provide a financial gain as jobs would be created that would be filled by our many unemployed persons, thus increasing trade in our local businesses and a livelihood for many on welfare rolls.

Socially we would benefit from this project by having desirable area for civic meetings, reunions and family gatherings. Also, recreational facilities would accompany or follow the project. At present Louisa has no theatre, nor places for entertainment. Our restuarants are only for short orders, and we have no areas for sports.

We therefore, ask that your committee give this project due consideration and see fit to support completion of this project so that our community will benefit by flood protection, increased revenues, jobs for the unemployed and a chance to raise the social and economic standards above our present disadvantaged state.

STATEMENT OF FRED ARRINGTON, PRESIDENT, FIVCO AREA DEVELOPMENT DISTRICT

CONSISTING OF THE FIVE COUNTIES OF BOYD GREENUP, CARTER, ELLIOTT AND LAWRENCE, THE FIVCO AREA DEVELOPMENT DISTRICT COMPRISES 1,500 SQUARE MILES AND 140,734 PEOPLE. THE REGION IS LOCATED IN NORTHEAST KENTUCKY AND IS BOUNDED ON THE NORTH BY THE OHIO RIVER; ON THE EAST BY THE BIG SANDY RIVER; ON THE SOUTH BY THE RUGGED MOUNTAINS OF THE CUMBERLAND PLATEAU; AND ON THE WEST BY SMALLER HILLS WHICH BORDER KENTUCKY'S FAMOUS "BLUEGRASS REGION." THE REGION IS COVERED WITH VERY BEAUTIFUL LANDFORMS AND THE COUNTIES ARE RICH IN COAL RESERVES.

NINETY PERCENT OF THE REGION IS STILL COVERED WITH FORESTS, BUT THESE AREAS UNIQUELY CONTRAST WITH THE OHIO RIVER VALLEY WHICH IS INDUSTRIALIZED AND URBANIZED. HISTORICALLY, THE REGION'S ECONOMY HAS BEEN SOLELY DEPENDENT UPON LOCAL NATURAL RESOURCES IN FACT, EXPLOITATION OF COAL, CLAY, PETROLEUM, SALT, NATURAL GAS, SAND STONE, AND TIMBER DOMINATED EMPLOYMENT POTENTIALS WITHIN THE REGION. HOWEVER, FARSIGHTED BUSINESSMEN, CIVIC LEADERS, AND PUBLIC OFFICIALS HAVE DILIGENTLY ATTEMPTED TO DIVERSIFY THE REGION'S ECONOMIC BASE. THE RESULT OF THIS WORK IS FIVCO'S AREAWIDE ACTION PLAN AND REGIONAL CAPITAL IMPROVEMENTS PROGRAM WHICH WAS FUNDED BY THE APPALACHIAN REGIONAL COMMISSION AND OUTLINES A MULTI-PHASE APPROACH TO REGIONAL ECONOMIC DEVELOPMENT.

THE KEY TO FIVCO'S SUCCESS IS A BOARD OF DIRECTORS THAT IS WILLING TO THINK BEYOND COUNTY LINES AND APPROACH PROBLEMS IN A REGIONAL MANNER. AS PART OF ITS OVERALL DEVELOPMENT STRATEGY, THE BOARD HAS ATTEMPTED TO DIVERSIFY THE REGION'S ECONOMY BY PROMOTING BOTH INDUSTRIAL DEVELOPMENT AND TOURISM. IN LIGHT OF THIS BACKGROUND, THE YATESVILLE DAM AND RESERVOIR IS A CRITICAL ELEMENT IN THE OVERALL ECONOMIC DEVELOPMENT STRATEGY OF THE DISTRICT.

IN LIGHT OF THE FIVCO DEVELOPMENT STRATEGGY, THE FIVCO BOARD OF DIRECTORS ON TWO OCCASIONS SUPPORTED THE CONSTRUCTION OF THE YATESVILLE DAM. SPECIFICALLY THE BOARD SUPPORTS YATESVILLE BECAUSE OF THE FOLLOWING:

(1) JOB DEVELOPMENT IS FIVCO'S MOST IMPORTANT UNDERTAKING.

THE YATESVILLE PROJECT WILL CREATE JOBS BOTH DURING CONSTRUCTION AND AFTER COMPLETION. DURING 1978 THE ARMY CORPS OF ENGINEERS ESTIMATE THAT TWO HUNDRED NEW JOBS WILL BE CREATED BECAUSE OF THE PROJECT. AFTER CONSTRUCTION, PEOPLE WILL BE NEEDED TO OPERATE THE DAM, MAINTAIN THE PARK, AND OPERATE RECREATION FACILITIES. ADDITIONALLY, JOBS WILL BE CREATED BECAUSE YATESVILLE WILL ATTRACT INVESTMENT INTO LAWRENCE COUNTY. NEW STORES, RESTAURANTS, MOTELS AND SPECIALITY SHOPS WILL BE CONSTRUCTED, AND JOBS WILL BE CREATED.

(2) THE YATESVILLE PROJECT WILL PROVIDE RECREATIONAL BENEFITS TO RESIDENTS OF KENTUCKY, OHIO, WEST VIRGINIA, TENNESSEE, AND VIRGINIA.

WITHIN TWO HUNDRED MILES OF THE PROPOSED YATESVILLE DAM ARE THE MAJOR METROPOLITAN AREAS OF LEXINGTON, KENTUCKY; CINCINNATI, OHIO; HUNTINGTON, WEST VIRGINIA; COLUMBUS, OHIO; AND CHARLESTON, WEST VIRGINIA. THE CITIES OF DETROIT, MICHIGAN; TOLEDO, OHIO; AND CLEVELAND, OHIO, ARE ALSO WITHIN EASY COMMUTING DISTANCE. THE FIVCO REGION IS PROUD OF ITS RECREATIONAL AMENITIES AND YATESVILLE WILL FURTHER ENHANCE THE REGION'S DEVELOPMENT AS A NATIONAL RECREATION CENTER. FIVCO HAS EXCELLENT FACILITIES FOR CAMPING, FISHING, BACK PACKING, CANOEING, AND SWIMMING. IN ADDITION TO PARKS, THE DISTRICT HAS SUCCESSFULLY COMPLETED A ONE HUNDRED NINETY MILE HIKING TRAIL CALLED "THE JENNY WILEY TRAIL." THE CONSTRUCTION OF YATESVILLE CAN ONLY ENHANCE THE POTENTIAL OF TOURISTS AND NATURALISTS TO UTILIZE THIS HIKING TRAIL. RECREATIONAL BENEFITS OF THE PROJECT ARE ESTIMATED AT ONE MILLION DOLLARS PER YEAR

(3) YATESVILLE, IF CONSTRUCTED, WILL NOT NEGATIVELY AFFECT OR HARM THE ENVIRONMENT.

EVEN ENVIRONMENTALISTS AGREE THAT THE YATESVILLE PROJECT WILL CAUSE NO SERIOUS HARM TO THE ENVIRONMENT. THERE ARE NO UNRESOLVED ENVIRONMENTAL ISSUES CONCERNING YATESVILLE. AN ENVIRONMENTAL

IMPACT STATEMENT HAS BEEN FILED AND ACCEPTED BY THE COUNCIL FOR ENVIRONMENTAL QUALITY AND THERE HAVE BEEN NO FINDINGS AGAINST THE IMPACT STATEMENT. THE PROJECT WILL NOT AFFECT ANY ENDANGERED OR RARE ANIMALS, NOR WILL IT DO DAMAGE TO RARE FLORA FOR NO SUCH PLANTS OR ANIMALS HAVE BEEN IDENTIFIED AT THE SITE.

(4) THE YATESVILLE PROJECT WILL HAVE A POSITIVE EFFECT ON THE QUALITY OF THE WATER SUPPLIES IN THE BIG SANDY AND OHIO RIVER DRAINAGE BASINS

THE REASON FOR THIS IS THAT MANY OF THE STREAMS AND TRIBUTARIES OF THE BIG SANDY RIVER FLOW AT LOW RATES DURING THE SUMMER AND FALL. DURING THESE PERIODS OF LOW FLOW THE DISSOLVED OXYGEN LEVELS AND THE POLLUTION LEVELS OF THESE STREAMS ARE VERY HIGH. THE YATESVILLE PROJECT WILL ASSURE A MINIMUM, BENEFICIAL FLOW LEVEL IN THESE STREAMS AT LOW FLOW PERIODS. CONTROLLED, MINIMUM FLOWS WILL ASSURE THAT POLLUTANTS AND DISSOLVED OXYGEN WILL BE ASSIMULATED INTO GREATER WATER FLOWS DURING THE YEAR.

THE YATESVILLE PROJECT HAS BEGUN AND AS OF MARCH, 1977, 7.8 MILLION DOLLARS HAVE BEEN SPENT ON THE PROJECT. THROUGH FEBRUARY 18, 1977, $4,700,000 HAD BEEN SPENT BY THE ARMY CORPS OF ENGINEERS ON REAL ESTATE ACQUISITION. FIFTY-SIX PERCENT (56%) OF THE TOTAL PROJECT AREA IN TERMS OF ACREAGE HAS ALREADY BEEN ACQUIRED. FURTHERMORE, $107,000 HAVE ALREADY BEEN SPENT ON ACCESS ROADS TO THE DAM SITE AND $3,000,000 HAVE BEEN SPENT ON ENGINEERING AND DESIGN. MOST IMPORTANTLY, 112 FAMILIES HAVE ALREADY BEEN RELOCATED FROM THE PROJECT AREA.

FOR THE ABOVE FIVE REASONS THE BOARD OF DIRECTORS OF FIVCO CONTINUES TO SUPPORT THE YATESVILLE DAM AND RESERVOIR PROJECT AND SUGGESTS THAT ALL LOCAL, STATE, AND FEDERAL AGENCIES CONSIDER THE BENEFITS THE PROJECT WILL GIVE TO THE REGION.

RESOLUTION

WHEREAS, the FIVCO Area Development District is an organization charged with the total responsibility for the development efforts in the counties of Boyd, Carter, Elliott, Greenup and Lawrence, and

WHEREAS, job development is one of the important undertakings of this total development effort and be it recognized that through the exploration of the potential present in the tourist and recreation industry, a great number of jobs will be produced, and

WHEREAS, the importance of impounded water is a natural focal point for the development of the tourist industry, and that the development of a major tourist related facility is dependent upon such development, and

WHEREAS, provision for flood control and water supply for industrial and commercial users contributes to the overall development of the region, and

WHEREAS, flood control for several small communities in Lawrence County, particularly Blaine, will be provided for, and

WHEREAS, the Yatesville Reservoir has been planned and is presently being constructed on the waters of Blaine Creek in Lawrence County, and

WHEREAS, nearly eight (8) million dollars or 14% of the total cost involved has been spent on the Yatesville project to date, and

WHEREAS, this reservoir and its development has never been opposed by any major organized opposition group in the past or present.

NOW THEREFORE, BE IT RESOLVED, (1) the FIVCO Area Development District supports the construction and the completion of the Yatesville Reservoir, and (2) that the FIVCO Area Development District spread on its minutes the endorsement of this resolution and that a copy be furnished to President Carter, members of the Public Works Committee of both the House and Senate, and public newspapers in the five counties.

RESOLUTION

WHEREAS, the FIVCO Area Development District is an organization charged with the responsibility for the total development effort in the counties of Boyd, Carter, Elliott, Greenup, and Lawrence, and

WHEREAS, Job Development is one of the important undertakings of the total development effort and be it recognized that through the exploitation of the potential present in the Tourism and Recreation Area a great number of jobs can be produced, and

WHEREAS, the importance of impounded water is a natural focal point for the development of the Tourist Industry and that the development of a major tourist related facility is dependent upon such development;

NOWTHEREFORE BE IT RESOLVED, that the FIVCO Area Development District supports the construction of the Yatesville Dam and BE IT FURTHER RESOLVED, that the FIVCO Area Development District will be the nonfederal participant for both the Yatesville and Kehoe Dams as required by Public Law 89-72.

Fred Arrington, President
FIVCO Area Development District

STATEMENT OF E. L. CROZIER, PRESIDENT, LOUISA (KY.) ROTARY CLUB

The support of your committee is solicited by the members of the Louisa, Kentucky Rotary Club for the continuation and completion of the Yatesville Dam Project.

We, the members of the Louisa, Kentucky Rotary Club, have voted unanimously to support this project for the following reasons:

1. The project has been started and several million dollars already expended in the purchase of the land and preliminary work.

2. It would provide employment both of a temporary and permanent nature; temporary employment during the construction and permanent employment opportunities upon its completion. Lawrence County had an official unemployment rate of 15.9 during the month of January.

   Since the recreational activities connected with a project such as this would provide employment especially for teenagers and young adults, our high unemployment rate would have to decrease.

   The tourist industry that would develop upon the completion of this dam would be a great economic value.

3. The State of Kentucky is committed to developing a State Park in conjunction with the development of this project.

4. The flood control potential has an additional benefit in that this project would contribute to the maintenance of the flow in the Ohio River. Just in the past few months, barge traffic on the Ohio River has been delayed because of low water levels of the river.

Shopping plazas, subdivisions and highway developments have been consuming undeveloped land at a rapid pace. According to one news report this past week, the State of Kentucky was losing such land to these developments at the rate of 250 acres per day. Whether this rate of loss is correct or not, one must observe these tremendous areas that are being covered by hard surfaces with no provision for retaining water run-off. If developments such as the Yatesville Dam are not encouraged, we are eventually going to find our nation without potable water supplies. We must call attention to the fact that several areas in the United States have suffered drought conditions this past year and had to go into water rationing.

Your time and patience in hearing us is appreciated. The Yatesville Dam Project, upon completion, will be an asset to not only our community, but the surrounding area which includes Southern Ohio, Western West Virginia as well as the Northeastern section of Kentucky.

STATEMENT OF JARRET A. PETERS, JR., LOUISA, KY.

Mr. Chairman and members of this committee we appreciate the privilege of being permitted to address you on a project which we consider to be very vital to the well being and welfare of the citizens of our community in Lawrence County Kentucky, The Yatesville Reservoir.

We are indeed very fortunate to be living in a country as great as the United States of America. How many other countries still enjoy the freedom which came about thru the foresight of our founding fathers. Where else in the world could a private citizen such as myself have the right to travel to the seat of his government and make his and his friends desires known and present the reasons they should be carried out by their government.

Mr. Chairman, you and the committees before have been presented statistical data which warrants the completion of the Yatesville Reservoir Project. So therefore, I will not bore you with these same facts.

The majority of the people and myself can understand why our government would undertake building the Yatesville Reservoir which is so badly needed for flood control in the Big Sandy area, plus many of the beneficial fringe benefits which the citizens would enjoy from such a wise and profitable undertaking. But what we can not understand is after the purchase of over 13,000 acres out of the approx. 20,000 total to be used and also the purchase of homes and the relocation of hundreds of families who had for generations made this land their home, that our government would suddenly stop such a profitable enterprise. These people had raised and educated their children on this land and worked hard for a better life for their children and themselves.

The majority of the people were willing to make this sacrifice which they knew would help all the people in their county and state.

Lawrence County Kentucky has approx. 272,000 acres or 425 sq. miles with a pop. of 14,134. The removal of this land from the tax rolls as well from agriculture purposes imposes a considerable hardship in additional taxes which is put on the balance of land left. With the completion of the Yatesville Reservoir Project, the additional revenue generated from such a project would greatly exceed the tax loss from the removal from the tax rolls of land purchased for the project.

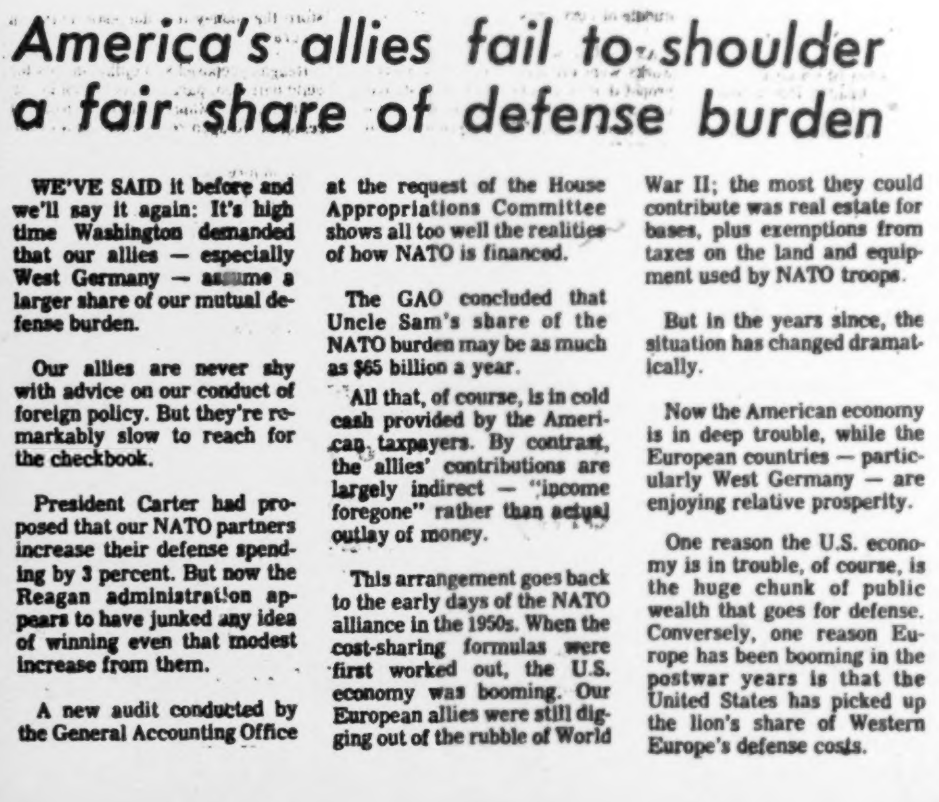
I, retired from the U.S. Postal Service in 1972 and while employed, I was a rural mail carrier for approx. one year in this area. The last eight years of my postal service was in the capacity of Ass't. Postmater in charge of rural and city delivery. I know practically every hollow and creek and person that lived in the Yatesville Reservoir area. Every time we had a hard rain most of these small streams over-flowed, blocking roads and creating high water on Elaine Creek. Naturally this also created higher water in the Big Sandy River which flows into the Ohio. Also the flooding damaged crops as well as the roads and bridges.

Mr. Chairman, we all are for less spending of tax payers money where possible but at the same time we are willing to be taxed for whatever it takes us to stay strong defensive and economically.

Its been said by different economist that the American people have just about reached their limit of taxation, so therefore, programs have to be cut. With this in mind I would like to quote information obtained from our local newspaper and hope maybe you would consider this info as an avenue for additional revenue for funding this project.

The following appeared in the Herald Dispatch, Huntington, W. Va. on Sat. March 28, 1981.

[From the Herald-Dispatch, Saturday, March 28, 1981]



America's allies fail to shoulder a fair share of defense burden

WE'VE SAID it before and we'll say it again: It's high time Washington demanded that our allies — especially West Germany — assume a larger share of our mutual defense burden.

Our allies are never shy with advice on our conduct of foreign policy. But they're remarkably slow to reach for the checkbook.

President Carter had proposed that our NATO partners increase their defense spending by 3 percent. But now the Reagan administration appears to have junked any idea of winning even that modest increase from them.

A new audit conducted by the General Accounting Office at the request of the House Appropriations Committee shows all too well the realities of how NATO is financed.

The GAO concluded that Uncle Sam's share of the NATO burden may be as much as $65 billion a year.

All that, of course, is in cold cash provided by the American taxpayers. By contrast, the allies' contributions are largely indirect — "income foregone" rather than actual outlay of money.

This arrangement goes back to the early days of the NATO alliance in the 1950s. When the cost-sharing formulas were first worked out, the U.S. economy was booming. Our European allies were still digging out of the rubble of World War II; the most they could contribute was real estate for bases, plus exemptions from taxes on the land and equipment used by NATO troops.

But in the years since, the situation has changed dramatically.

Now the American economy is in deep trouble, while the European countries — particularly West Germany — are enjoying relative prosperity.

One reason the U.S. economy is in trouble, of course, is the huge chunk of public wealth that goes for defense. Conversely, one reason Europe has been booming in the postwar years is that the United States has picked up the lion's share of Western Europe's defense costs.

The amount needed to continue or complete Yatesville Reservoir Project is minute in comparision to the 65 Billion Dollars we send to NATO.

We the citizens of Lawrence County Kentucky believe and insist on a strong defense - but at the same time we believe this defense should start at home.

Mr. Chairman and members of this committee we thank you very much for listening to our requests and have confidence that you will sincerely consider what we have said today. Again we thank you for your courtesy.

STATEMENT OF ROSE W. PERRY, PRESIDENT, GFWC-LOUISA JUNIOR WOMAN'S CLUB

The General Federation Woman's Club-Louisa Junior Woman's Club, a member of the largest woman's volunteer organization in the world, is deeply concerned about the proposed termination of the Yatesville Dam Project.

Our civic organization, comprised of females ages 18-36, represents approximately 20% of the population of Lawrence County and we are worried about the economic situation, not only now but also for the future, in our area. Recent figures show an unemployment rate of 16% in Lawrence County, which is nearly the highest rate in our state, as well as a per capita income in our area that is approximately $1,500.00 below the average for our state. Presently, employment opportunities are limited to mining and service occupations, forcing a majority of the county's young adults to seek employment in the major urban industrial areas of our country. With this mass exit of the county's potential workforce, our area will soon be depleted of its most important resource, that of intelligent, competent people. With the completion of the Yatesville Dam Project, this bleak future for Lawrence Countians can be brightened with the prospect of increased employment opportunities in more diversified occupational fields.

Our organization is also concerned about the lack of county recreational facilities for the family unit. Areas of recreation are available in other counties only through transportation via private automobile, thus adding more expense to an already depressed economic situation. We believe that the money now being spent by Lawrence County residents for out-of-county recreation could be better utilized here in our own area to help increase the standard of living and economic base for Lawrence County.

The Louisa Junior Woman's Club urges the committee members to strongly consider the liability of not having the Yatesville Dam Project approved and to remember that stagnation is a problem for everyone, not just the residents of Lawrence County.

STATEMENT OF R. C. WELLS, LOUISA, KY.

In 1965 the Federal Government, acting through the U. S. Army Corps of Engineers, made a commitment to the people of Lawrence County, Kentucky, and more particularly to the citizens of the Yatesville area of Big Blaine Creek, to construct a flood control reservoir.

In 1973 the initial appropriation was made by Congress, and since then almost $13,000,000.00 has been spent on this project. Starting in 1974, a total of nearly 15,000 acres of land has been purchased and at least 700 people have been displaced. The homes and improvements have been demolished and a virtual wilderness has resulted. There is no tax revenue or other income being derived from this area. This results in the county being unable to provide the basic services to the residents of the area.

As most of you know, this project was halted at one time, resulting in several million dollars being wasted. I understand the contractor was paid more to stop construction than was earned by the work on the project. We should see this does not happen again.

This project was competently planned by the U.S. Army Corps of Engineers over a period of some fifty to sixty years. There are no environmental objections; there are no community objections (at best token); our Congress has voted to authorize and fund this project; it is a cost feasable project; it is a project that will prevent ravishing floods; it is a project that will help to put people back to work in a high unemployment area; it is a project that will enhance the beauty and viability of the Community, County and state.

I have talked with numerous people who have been displaced by this project and all are in favor of the Yatesville Reservoir being completed. Some are bitter about losing their property and having to relocate. They say, "We do not believe our president would halt a project that would do good for so many people, especially after we were told it would be built. Our land was taken for that specific purpose." I certainly feel for these people and I am sure you do also.

Let us look for just a moment at what will happen if the Yatesville Reservoir is not completed:

1. We will be left with continuing ravishing floods on Big Blaine Creek and the Lower Big Sandy River.
2. Boats will continue to be tied up on

the Lower Ohio River as they were just a few months ago, due to the reduced natural flow of maintenance water.

3. our economy will continue to decline and more people will be forced to go on the so-called dole.
4. The people who were displaced will continue to be disillusioned and bitter because they feel betrayed.
5. Most importantly, the citizens will lose confidence in the Federal Government.

We need the support of this committee, and also the President of the United States, to complete this much needed Yatesville Reservoir.

I believe this is the fourth time I have appeared before you and I wish to thank you kindly for the opportunity. I hope this project will be completed without further delay.

Thank you again.

Statement of Shirley Hurt, Lawrence County, Ky., Representing Lawrence County Housing Authority

I WANT TO THANK YOU AND MEMBERS OF YOUR COMMITTEE FOR AGAIN ALLOWING ME TO PRESENT MY VIEWS IN FAVOR OF THE YATESVILLE DAM IN LAWRENCE COUNTY. NOW, AND IN THE PAST BOTH THE MEMBERS OF THE HOUSE AND SENATE SUB-COMMITTEES HAVE DISPLAYED THEIR KINDNESS AND CONSIDERATION TO OUR CAUSE.

I AM SHIRLEY HURT. KENTUCKY IS MY NATIVE STATE AND I LIVE IN LAWRENCE COUNTY, WHERE I HAVE TAUGHT IN RURAL SCHOOLS AND HAVE DONE SOCIAL WORK. I AM HERE TODAY AS A REPRESENTATIVE OF THE LAWRENCE COUNTY HOUSING AUTHORITY. MY HOME IS ON A FARM ON ROUTE 23 ABOUT 1 MILE FROM THE MOUTH OF BLAINE CREEK, WHERE IT EMPTIES INTO BIG SANDY RIVER. I AM VERY FAMILIAR WITH THE FLOODING PROBLEMS OF THIS CREEK AND THE RESULTS OF THIS FLOODING ON THE LAND ALONG THE BIG SANDY.

MORE THAN 13,000 ACRES OF LAND HAS ALREADY BEEN PURCHASED, 108 FAMILIES HAVE MOVED FROM THIS LAND. BESIDES THE PEOPLE WHO OWNED THEIR HOMES THERE AND MOVED, THERE WERE MANY LITTLE HOUSES ON THIS LAND WHERE PEOPLE LIVED. THEY PAID VERY LITTLE RENT AND THEY HAD A PLACE TO RAISE THEIR GARDENS AND AT LEAST HAD HOUSING. NOW THEY TOO ARE DISPLACED. ALL OF THESE HOUSES ARE TORN DOWN AND THESE PEOPLE ARE WANTING PLACES TO LIVE.

THERE ARE 14,134 PEOPLE IN LAWRENCE COUNTY. WE HAVE A HIGH UNEMPLOYMENT RATE. FARM INCOME IS FAR BELOW THE POVERTY LEVEL. THROUGH NO FAULT OF THEIR OWN, 1/3 OF OUR PEOPLE DEPEND ON SOME FORM OF PUBLIC WELFARE FOR THEIR LIVELIHOOD. THERE IS NO MAJOR INDUSTRY IN THE COUNTY.

WE HAD HOPES THAT THE COMPLETION OF THIS PROJECT WOULD BOOST THE ECONOMY AND THE MORALE OF OUR PEOPLE.

THE FOLLOWING IS A QUOTE FROM A RECENT ARTICLE PUBLISHED IN THE COURIER JOURNAL BY J. J. JORDAN, LAWRENCE COUNTY JUDGE, "THIS PROJECT WILL BE IN THE MIDDLE OF A NEW SERIES OF TRAFFIC ARTERIES; FOUR LANE U.S. 23 FROM ASHLAND; FOUR-LANE NEW COAL HAUL ROAD FROM INEZ TO ULYSSES; NEW LOUISA-FORT GAY BRIDGE CONNECTING THE NEW TOLSIA HIGHWAY, AND U.S. 52, ATTRACTING THE WEST VIRGINIA TOURIST.

YOU WILL FIND ATTACHED A LETTER DATED APRIL 8, 1978 BY G. K. HARMON, WHO WAS THEN 95 YEARS OF AGE. I RECENTLY TALKED TO MR. HARMON AND HIS SENTIMENTS HAVE NOT CHANGED IN REGARD TO THE NEED OF THE YATESVILLE DAM, OTHER THAN HE IS RATHER IMPATIENT AS HE WILL SOON BE 98.

MR. HARMON IS A DESCENDANT OF MATHIAS HARMON, WHO AFTER OUR EASTERN KENTUCKY HEROINE, JENNIE WILEY WAS CAPTURED BY THE INDIANS IN 1790, ORGANIZED A GROUP AND WAS PREVENTED FROM RESCUEING HER AS THE WATERS AT CHEROKEE IN LAWRENCE COUNTY WAS AT FLOOD STAGE. THESE WATERS NOW IN 1981 GET MUCH HIGHER.

I AM NOT HERE TODAY FOR MONETARY GAIN OR PRESTIGE. I AM HERE FOR WHAT I THINK IS BEST FOR OUR PEOPLE. I LOVE MY COUNTRY, MY HOME AND MY FAMILY. I ADMIRE YOU MEN AND WOMEN, WHO MAKE UP THE BRANCHES OF OUR GOVERNMENT. YOU HAVE A BIG JOB ON YOUR HANDS. I HAVE NEVER FAILED TO VOTE, EVEN THOUGH I'VE SOMETIMES HAD TO RIDE HORSE BACK OR FARM TRACTORS TO GET TO THE POLLS. MEMBERS OF MY FAMILY HAVE ALL BEEN VOLUNTEERS FOR MILITARY SERVICE. I JUST HATE TO HAVE THOUSANDS OF ACRES OF OUR LAND BOUGHT AND NOT USED FOR THE PURPOSE IT WAS INTENDED FOR BUT LET LAY WASTED, UNATTENDED. I AM A TYPICAL LAWRENCE COUNTIAN!

Statement of Robert Crum, President, Louisa (Ky.) Bass Club

The Louisa Bass Club is the largest and most active organization in the Lawrence County, Kentucky area which is devoted to the preservation of wildlife through ecological and environmental management. Our specific aim is to upgrade the fisheries within our area so that later generations may enjoy their natural heritage. To this end, the Louisa Bass Club strongly supports the funding for, with the resulting construction of, the Yatesville Dam in Lawrence County, Kentucky.

The Yatesville project, when completed, will provide the citizenry a wide range of benefits, including: flood, clean water and erosion control, new jobs, both temporary and permanent, a stable economic base for a chronically depressed area, and of course, wildlife preservation which will generate recreational opportunities for a tri-state area, thereby making the project of more than local concern. With such a wide range of benefits it is recognizable that the monies expended on a project such as Yatesville create both an immediate and a long-term economic impact - an immediate impact through temporary jobs necessary for construction and a long-term impact through capital investment for the created recreational and industrial demands. And the benefits directly accruing to the Yatesville area indirectly accrue to the government through additional taxes generated by private investment. Construction has started on the Yatesville Dam. Approximately 14,000 acres of Lawrence County, Kentucky land has been taken from Lawrence Countians by the United States of America through its power of eminent domain. The Louisa Bass Club respectfully requests this Committee to endorse the carrying forward of this partially completed project in fairness to and for the good of the people of Lawrence County, Kentucky.

STATEMENT OF GENE MARVIN, JR., EDITOR, BIG SANDY NEWS, LOUISA, KY.

It might seem hypocritical, since I am in sympathy with most of your, budget reducers, to appeal the report that funding for the Yatesville Dam project in Lawrence County will be deleted for FY 1982, but I think there are mitigating circumstances.

When the Blaine Creek flood control-water control-recreation project was axed by former President Carter in 1977, 13,000 acres of land had been purchased uprooting 246 families. Many were disgruntled of the thoughts of leaving the old homeplace that in some instances had been a family heritage for as much as 100 years.

The government spent $11,194,500 which included letting a dam construction contract and the cost of buying out the contractor when funding was discontinued.

President Carter was propagandized with much misinformation from environmentalists, especially the Lexington, Ky. based Kentucky Rivers Coalition which is concerned basically with ideology and not the welfare of people.

Carter changed his mind about the project later in his administration, recommending $2 million, which congress okayed, for the current fiscal year and nearly $7 million for FY 82.

There are less than 10 persons in Lawrence County actively against Yatesville, but what about the 13,000 acres of land purchased for the project and more that is to be purchased with the current allocation?

It's a wasteland-both physically and economically and according to several federal sources cannot be returned to the public sector (if ever) before 10 years or more has elapsed.

The loss of this land and more importantly its people have cost Lawrence County thousands of dollars in taxes, plus other economic deprivation, since many of them moved to other areas and other counties.

Lawrence County has an umemployment rate of more than 10 percent which ranged as high as 16 percent last year. We lost a carpet making plant that laid off about 250 persons, and because of EDA bureaucratic blunderings or inertia, a grassroots attempt to locate a replacement industry was lost.

Yatesville would prohibit devistating flooding (two out of every three years) of the Blaine Creek watershed causing millions of dollars of damage and human misery, plus run off effects into the Big Sandy River and onto the Ohio River about 20 miles away.

Before the Carter ax, the local development district and the Kentucky Department of Parks had planned to develop Yatesville for fishing, boating, picnicing, a lodge and other tourist attractions in hopes that this new industry would stimulate a gasping economy.

I agree with President Reagan's war on federal fiscal extravagance, but a "bricks and mortar" project such as Yatesville which would produce jobs; which would provide recreation to a coal mining area (adjacent Martin County) without traveling many miles, is within his prudent perspective of mercy.

It would be a tragedy that this worthy project be deleted permanently and the hard working, and those that want to be productive, continue to be victimized by an uncaring bureaucracy and federal system.

This system has perpetuated a fraud in Lawrence County-forcing its citizens to leave their homes under the pretense that something productive would be the result.

Billions of dollars have been spent by the government and it will continue to allocate on non-productive, temporary trubutes in too many areas (foreign policy one of them) to an ill-conceived federal fiscal ideology that homage to the underachievers is what America is all about.

American history dialectically disproves this.

Yatesville would be a lasting monument to grass roots Americana-that has fought and died proudly in all of its wars and contributed to this country's greatness and growth.

Enclosed is a recent story concerning Yatesville.

STATEMENT OF DAVID W. McKENZIE, LAWRENCE COUNTY, KY.

The Yatesville area is deprived of cultural advantages and economic growth of diversified interests. The land is victim to floods, and the people recall President Johnson's visit to the area (Martin County) to see just what a deprived area looks like.

The Dam is our hope. It will protect the area from flood damage, provide broad economic growth, and compliment the beauty of the rural hill country with a well placed recreational opportunity.

High unemployment is the rule in this area from one year to another. Opportunities to correct this are at hand as the project will allow visitors an opportunity to enjoy the positive aspects of appalachia, and in so doing, to convert a deprived area into the highly prized area of its potential.

Acquisition of land has occurred, for the singular purpose of the Dam. It has displaced homesteads and communities, leaving nearly half the county barren and creating major problems for those displaced. This is our investment for the future, and we have faith that the area will be protected and developed with completion of the Yatesville Dam.

LAKE WICHITA, HOLIDAY CREEK, TEX., STUDY—OPPOSITION

STATEMENT OF JIM HORANY, VICE CHAIRMAN, LAKE WICHITA STEERING COMMITTEE

Senator KASTEN. Mr. Jim Horany, vice chairman, Lake Wichita Steering Committee. I guess you have to be the most patient person in the room. I thank you very much for waiting. I am sorry we are unable to move this committee meeting forward a little bit faster.

Mr. HORANY. Thank you, Mr. Chairman. I would like to introduce my colleague, Mr. John Adams, who is with me on this particular presentation. He is an engineer from Wichita, Tex., and chairman of our Lake Wichita Steering Committee which represents 1,700 property owners and taxpayers of Wichita. We have filed our statement with your clerk in connection with this study. I would like to have it included as part of the record.

Senator KASTEN. Without objection, it will be a part of the permanent hearing record.

[The statement follows:]

STATEMENT OF JIMMY P. HORANY, VICE CHAIRMAN, LAKE WICHITA STEERING COMMITTEE

Please be advised the undersigned, representing the Lake Wichita Steering Committee and over 1,700 property taxpayers of Wichita and Archer Counties, Texas, are opposed to the budget request of $100,000.00 as proposed by the Tulsa District, U. S. Army Corps of Engineers, to study and design a flood control plan for Lake Wichita-Holliday Creek for the City of Wichita Falls, Texas. This opposition is based upon the fact that if the $100,000.00 is approved by the Congress and the President, then it will open the door for the U. S. Corps of Engineers to come back to Congress for a grant to the City of Wichita Falls, Texas, for about 25 to 30 million dollars to construct the project. The 1977 estimated cost of the Corps of Engineers plan for Lake Wichita and Holliday Creek amounts to $19,025,000. The estimated cost as of today, because of inflation, for the project will exceed $25,000,000. The Corps estimates that it will be four to eight years for study, design and construction of the Lake Wichita-Holliday Creek Project. The project ultimately could cost the taxpayers over $50,000,000 (See Exhibit "A" 1977 Corps of Engineers cost estimate, table 9). Our opposition is also based on other factors, as follows:

1. In 1976, the U. S. Corps of Engineers, Tulsa District, proposed a preliminary report to the City Council of the City of Wichita Falls, Texas, to try and prevent or reduce flooding of Holliday Creek downstream, a distance of 9 miles from Lake Wichita spillway to the Wichita River. The Creek flows thru the Southwest edge of the City of Wichita Falls, to the Northeast part of town where it converges into the Wichita River. The Corps plan is to widen and deepen the Creek, and grass line the channel; the plan does not make any recommendation about the Wichita River, which during its flooding, its waters will back up and into Holliday Creek, and block the flow of water in Holliday Creek.

2. The Corps plan also recommends that the spillway of Lake Wichita be lowered by 4½ feet (from 980.7 feet to 976 feet M.S.L.), and that a new earthen dam be constructed to help prevent flooding to property owners around the lake. The property owners around Lake Wichita and the City of Wichita Falls are opposed to the lower spillway, since the plan will reduce the body of water from the present 11,580 acre feet to 5,640 acre feet (See Exhibit "B", Corps of Engineers table C-7). The lower spillway will cause more flood waters downstream Holliday Creek. The present spillway holds back and prevents the waters from flooding property owners along the creek downstream. The lower spillway will cause the loss of a good source of water supply, and recreational lake for fishing, boating, etc. adjacent to the City of Wichita Falls.

3. The City of Wichita Falls owns and operates Lake Wichita, which was built in 1901, and has 2,100 acres of land situated on the South edge of Wichita County and the North part of Archer County, Texas (See Exhibit "C" Map of Lake Wichita). Lake Wichita was the principal source of potable water supply until 1944, when the taxpayers of Wichita Falls voted for bonds to build Lake Kickapoo. In 1964, the city taxpayers again voted for bonds to build Lake Arrowhead. Lake Wichita is now used mainly for recreation, such as fishing, boating, skiing, and also used by property owners around the lake for domestic water needs and irrigation of gardens, trees, grass, etc. The lake can be used to supplement the water supply needs of the city in case of periods of droughts. The Corps of Engineers plan would eventually dry up Lake Wichita if the spillway is lowered by 4½ feet; the Corps plan makes no provision to remove the sand and sediment which has been flowing into the lake since 1901, at the rate of 100 acre feet per year. The Corps states that by the year 2080, the lake will be -0- as set forth in Exhibit "B", Corps of Engineers table C-7.

4. Holliday Creek downstream has been flooding at different intervals and years, for more than 50 years (See Exhibit

"D" 1931 newspaper report). During the past 46 years, the past Boards of Aldermen for the City of Wichita Falls have neglected and failed to plan and construct a project to help prevent flooding downstream, Holliday Creek. Said City Fathers have placed a higher priority for city funds for other projects, some of which are not essential or important for the growth of the city, or necessary to benefit and serve its citizens. In 1980, the City Fathers placed a higher priority by allocating $1,500,000 for the so called "Green Belt Project" to beautify the Wichita River. The city has appropriated over $1.5 million to the Mid Town, Now Project; however, the funds have not been expended since 1977, due to legal requirements by H. U. D. Block Grant Funds. In 1979 and 1980 the city expended $450,000 of revenue sharing funds to construct a Farmers Market in downtown Wichita Falls. In 1979 and 1980 the city expended over $3,500,000 to purchase and remodel the former Dillards Department Store into an Activities Center, for clubs and organizations, etc. to meet in. In 1980, the city spent over $50,000 from H.U.D. Block Grant Funds for Depot Square, to move an old depot from Burkburnett, Texas, to Ohio Street in downtown Wichita Falls, as a museum, to try and re-vitalize the downtown businesses who are losing its customers to the shopping malls and surburban business districts.

5. In September, 1979, the Holliday Creek committee presented a petition with signatures of 1,645 property owners to the Board of Aldermen of the City of Wichita Falls, with a plan to help prevent flooding downstream, Holliday Creek, to dredge, widen, and deepen the creek, clear the trees, shrubs and debris from the creek; it also proposed to maintain Lake Wichita spillway at its present level, to repair and strengthen the dam to withstand the 100 year flood at an estimated cost of 10 million by its engineers. Said project was to be financed on a pay as you go basis for three (3) years, allocating funds from excess sales tax rebates ($1,000,000 in 1980), H. U. D. Block Grant Funds ($1.2 million in 1980), and Revenue Sharing Funds ($1,500,000 in 1980), also to allocate additional funds from the same sources in 1981, 1982, and 1983 if necessary (See Exhibit "E" Newspaper Record of Holliday Creek Petition).

6. The Holliday Creek Committee Plan was rejected by the Board of Aldermen for the City of Wichita Falls. Instead, they adopted a Resolution #2495 on April 1, 1980, pledging to formulate a plan to prevent flooding downstream Holliday Creek in 1980, and finance said project, without a Federal Grant, if the Congress fails to provide said funds; during the 1980 sessions, Congress failed to provide said funds. The City Fathers and former Mayor and Aldermen campaigned and spent funds to help defeat the Holliday Creek Committee's Plan. They wanted the Federal Government to pay for the project, which the city itself is financially able to construct and pay for said project.

7. The City of Wichita Falls is in good financial condition, and has a surplus of 5.7 million dollars and can implement the Holliday Creek Plan and without Federal funds. On February 17, 1981, the City Council approved and allocated funds to begin dredging and buying up right of ways for Holliday Creek (See Exhibit "F" Newspaper Report of February 19, 1981). Also see Exhibit "G", Newspaper reports of a $5,000,000 surplus of city funds and sales tax rebate increase revenues of 46% as of March 18, 1980 over said period in 1979.

In conclusion, the undersigned respectfully submits to the subcommittee to reject the budget request of $100,000.00 to study the Corps of Engineers Lake Wichita-Holliday Creek plan. We wish to thank the Subcommittee on Energy and Water Development for this opportunity to appear before said committee at this Budget Hearing.

ESTIMATED COST FOR THE RECOMMENDED PLAN
(October 1977 Price Levels)

Item	Embankment	Spillway Costs	Channel Costs	Total Costs
	$	$	$	$
Lands & damages	1,000,000	—	1,100,000	2,100,000
Relocation	—	—	3,977,000	3,977,000
Dams	1,620,000	1,500,000	—	3,120,000
Channels	—	—	5,691,000	5,691,000
Engineering & design	146,000	134,000	870,000	1,150,000
Supervision & inspection	94,000	93,000	575,000	762,000
Total First Cost	2,860,000	1,727,000	12,213,000	16,800,000
Interest during construction				
(4 years @ 6⅝%) ←	379,000	229,000	1,617,000	2,225,000
Total Investment	3,239,000	1,956,000	13,830,000	19,025,000
Interest & amortization				
(100-year @ 6⅝% interest)	215,000	130,000	918,000	1,263,000
Operation & maintenance	12,000	6,000	32,000	50,000
Major replacements	3,000	1,000	6,000	10,000
Total Annual Costs	230,000	137,000	956,000	1,323,000

LAKE WICHITA
ELEVATION—CAPACITY TABLE

Elevation	1958 Area (acres)	Capacity 1958 (acre-feet)	Capacity 1960 (acre-feet)	Capacity 2080 (acre-feet)
965	0	0		
966	120	60	0	
968	310	490	190	
970	550	1,350	817	
972	810	2,710	1,925	
974	1,040	4,560	3,552.	
976	1,310	6,910	5,640	0
978	1,650	9,870	8,270	1,246
980	2,000	13,520	11,580	4,366
982	2,400	17,920	15,780	8,571
984	2,900	23,220	21,090	13,870
986	3,490	29,610	27,480	20,260
988	4,150	37,250	35,120	27,900
990	4,840	46,240	44,110	36,890
992	5,670	56,570	54,620	47,400
994	6,590	69,010	66,880	59,660
996	7,750	83,150	81,020	73,800
998	8,600	99,300	97,170	89,950
1,000	9,620	117,500	115,370	108,200

top of dam (about elevation 986) down about 6 feet. Below the fence the embankment slopes outward and is protected by dumped concrete to the normal water surface at about elevation 976. The general condition of the spillway is poor, and the spillway is inadequate to handle floods that can occur in the basin. The spillway is earthen with a concrete weir. The earthen spillway (400' wide x 6' deep) is choked with willows, salt cedars and tall grasses. FM 2380 bridges the spillway about 300 feet upstream of the spillway. The concrete spillway surface is badly spalled with reinforcing steel exposed. The right abutment of the spillway is breached with a high percentage of flood flows being

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[From the Wichita Falls Times, Monday, Feb. 9, 1981]

FILES OF THE TIMES

50 YEARS AGO—FEB. 9, 1931

For the fifth time in nine months, Holliday Creek left its narrow, twisting bed Sunday to swell out over the water-soaked prairie, flood highways, submerge golf courses and threaten homes along the creek, as a 2.93-inch rain overflowed the Diversion lake and Lake Wichita.

PETITION TO SEEK WORK ON HOLLIDAY CREEK

(By Rocky Scott, staff writer)

Representatives of a group called the Holliday Creek Committee said Monday they plan to circulate a petition that will ask for city funds and city crews to begin flood control work on Holliday Creek.

Chairman Johnny Watson said the resolution proposed in the petition calls for work to begin 120 days after the resolution is adopted.

"This (resolution) is not a cure-all," Watson said, "but we feel that the plan is a necessity. The Holliday Creek floods damage the whole city, not just the residents in that area."

Jimmy Horany, attorney representing the committee, said the petition asks Wichita Falls City Council to provide funds for the project from sales tax rebates, revenue sharing funds or from the general fund. He said the petition calls for no tax bond proposal.

"In the past, the city has given a high priority to things that were not as essential as this," Horany said. "We feel many of those projects were needed, but that flood control on Holliday Creek is needed more."

He said the U.S. Army Corps of Engineers has been studying flooding along Holliday Creek since 1938. The corps has approved a $16 million flood control project for Lake Wichita Dam and Holliday Creek. The proposal is being studied by the U.S. Office of Management and Budget.

If the corps proposal receives approval from OMB, it would move to the House of Representatives, where it would be studied by a subcommittee and a committee before being brought before the House. Full House and Senate approval, along with presidential approval, is required before funds would be made available.

Included in the petition is a request to divert Holliday Creek from the spot where it enters the Wichita River to a spot farther downstream by use of a channel.

"The problem now," Watson said, "is that the creek empties into the river against the flow. When the river goes up, it pushes water back up the creek, and when the creek is full, it can't drain. That's what causes the flooding."

"Elevation is one of the most significant factors involved in drainage. There's a drop of six-tenths of an inch per hundred feet along Holliday Creek from Lake Wichita Dam to the Wichita River. You'd have to drop the entry into the river considerably to get any effect."

Watson said an engineer has looked at the proposed channel and determined that there would be little change in elevation.

Lillard also said there "are so many other problems involved" with Holliday Creek that changing "one or two of them won't help that much."

The petition also calls for cleaning of the "floodway" and maintenance on a yearly basis, and dredging if necessary.

Listed as sponsors on the petition are: Johnny Watson, 3903 Lake Park; John Adams, 5121 Lake Shore; Cecil Allen Smith, 1705 Monroe; Gene Shearman, 4207 Lake Park; James Elwin Gentry, 2707 Amherst; Irene Cheatheam, 2307 Brook; and Gene A. Buchanan, 101 North Oriole.

Watson said the committee plans to meet at 2 p.m. Thursday at ABC Motors, 2912 Holliday, to distribute petitions and begin collecting the 750 signatures required. He said the meeting will be open to interested persons.

[From the Wichita Falls Record News, Wednesday, Feb. 18, 1981]

FUNDS TARGETED FOR HOLLIDAY CREEK WORK

(By Gail Badgett, staff writer)

More than $5.7 million in reserve and federal funds were targeted Tuesday for city improvements and obligations, including work on Holliday Creek drainage.

Wichita Falls City Council allocated money for street projects, Holliday Creek improvements, Municipal Court Annex, the sanitary landfill and transfer station and other improvements.

About $2.1 million will be taken from the city's reserve fund, leaving $3.3 million unappropriated for emergencies. The remaining share $3.6 million federal share will come from revenue sharing, community development and a Department of Housing and Urban Development discretionary grant, although the HUD money hasn't been approved yet.

The previously obligations not funded include matching money for Federal Emergency Management Administration tornado reconstruction projects and the city's portion of the Wichita County Tax Appraisal District cost.

The council allocated $60,000 of reserve funds for acquisition of right-of-way along Holliday Creek. The city will request right of way land owned by public utilities be donated because, City Manager Stu Bach said, the land is in the flood plain and can not be used anyway.

The city will begin purchasing and accepting donations of right of way land along the creek so that when the money for the project is aproved the contracts could be let as soon as possible, Bach said.

Of the about 170 acres needed along the creek, public agencies, including Wichita Falls Independent School District, Wichita County, Midwestern State University, Wichita Falls State Hospital and the city, own 99.41 of the acres.

The city also will request donations from landowners along the creek who might be able to use the donation as a tax break, Bach said.

A proposed $21.4 million U.S. Army Corps of Engineers plan to rebuild the Lake Wichita Dam and spillway and construct 9.3 miles of grass-lined channel along the creek awaits congressional action.

The $8.7 million city share of the project is largely the expense of right of way and easements and relocating structures.

The council also allocated $20,000 to be used to begin cleaning and dredging the downstream end of the creek. If right of way land isn't obtained and people won't consent to cleaning out the creek on their property, the city can enforce the weedlot ordinance to help the situation. "If we have a bad rain, this won't stop the flooding, but it will enhance the characteristics of the creek," Bach said.

The city will begin lobbying efforts in the U.S. Congress to gain authorization of the full Corps project, including engineering design and construction, and an appropriation of $250,000 to meet the Corps' engineering capability the first year, Bach said.

President Carter's budget proposal requested $100,000 of the $250,000.

About $1.8 million of reserve, General Revenue Sharing and possible reprogramed HUD funds were targeted for street improvements. Reconstruction of streets in and outside of the tornado area, overlaying of streets, seal coating and rehabilitation will affect 365 blocks of city streets.

The Lake Shore Drive area is targeted for water and sanitary sewer improvements, and about $2.5 million will be spent for the sanitary landfill and transfer station equipment and land.

If approved, money from HUD will fund cleanup of Kiwanis Park, traffic light improvements and possible clean-up for slabs in the tornado area.

A study of Lake Kickapoo involving the rehabilitation of the lake and dam will be funded, as will money for the completion of the City Hall annex.

[From the Wichita Falls Record News, Friday, Mar. 14, 1980]

CITY SURPLUS FUNDS TOTAL $5 MILLION

(By Jim Webre, staff writer)

City of Wichita Falls has a general fund surplus of $5,055,745, at least on paper, according to Chief Accounting Officer Gerald Carlson.

The figure includes $1,548,287—the difference between city revenue from sales taxes and other sources and expenditures for fiscal year 1979—plus surpluses from previous years.

"We don't have it all in hard cash," Carlson said. Of the $5 million, $2,476,000 is outstanding and carried on the city's books, though it is not in hand.

In cash and certificates of deposit, Carlson said, the city has $3,254,000 as of Sept. 30, 1979.

"We carry it as excess revenue over expenditures," Carlson said.

Surplus funds are invested, drawing interest as high as 14.43 percent.

Surplus funds soon to be invested will draw 15.96 percent, Carlson said. After current certificates of deposit mature, the city will draw slightly more than 16 percent on new surplus fund investments.

However, about $5 million already is allocated for future expenditures, he said.

Surplus funds totaling $256,272 "are encumbered to pay for several outstanding city contracts and purchase orders," Carlson said. Repair of Memorial Auditorium's roof and work on Martin Luther King Center are two such outstanding debts.

For fiscal year 1980–81, the official said, surplus funds will be used to cover about $300,000 in expenditures above revenues.

"That is an estimate," Carlson said, adding the city's financial standing "is in pretty good shape considering the tornado."

[From the Wichita Falls Record News, Tuesday, Mar. 18, 1980]

SALES TAX REBATE FIGURES SHOW GAIN

(By Bruce Fisher, business editor)

City sales tax rebates for the first quarter of 1980 were up about 38 percent statewide, while Wichita Falls' rebate was up 46 percent over the 1979 figure, said Texas Comptroller Bob Bullock.

Apparent increases are partly offset by the fact that during the first quarter of 1979, city sales tax allocations were down due to late filings and a backlog of about 2,400 returns in the agency's accounting system, Bullock said.

System improvements have eliminated the backlog and strengthened the agency's ability to quickly handle returns and put more money into the system for rebates, he said.

Wichita Falls' rebate for 1980 as of Feb. 28 was $1,411,221, compared to $963,982 for the same period last year.

Bullock said 1980 rebates to date for Texas cities were $138.7 million, compared to payments totaling about $100 million for the same period last year.

Mr. HORANY. We are here in opposition to the Corps of Engineers' request for $100,000 to study the Lake Wichita, Holliday Creek project. The reason we are against that request of the appropriations for the fiscal year 1982 is because their plan, which has been submitted previously, eventually will call for a $25 million project to be constructed as part of the project.

I have submitted with my statement various exhibits to support what we have stated in this statement. One exhibit, for instance, refers to the Corps of Engineers table in their 1977 report which shows they are asking that their project, preliminary estimated cost of the plan was $19,025,000.

Further, they state that during the years of construction the interest rate is 6.58 percent. We know that is unrealistic.

Senator KASTEN. I think they had better come down to Wichita and find your bank.

Mr. HORANY. Right. So, we say that that kind of interest, even though at that time it might have been, on today's figures it is way off base. We know you can't get interest less than 10, 12 percent and even the U.S. Treasury bills and notes are bringing that today.

Further, we state that our opposition is because of the fact that the

Corps planned to reduce Lake Wichita's spillway from 980.7 feet to 976 which is 4½ feet. That eventually will do away with the lake. We show that the Corps of Engineers report—these are not our figures—that under this table it shows that if the spill rate level is 976 feet, that reduces the size of the lake from 11,500 acre-feet to 5,640. By the year 2080, in this table, it shows it will be zero. That is because of sand, silt, and sediment flowing downstream into Lake Wichita, that feeds the Lake Wichita watershed and will fill up the lake at the rate of 1.8 feet a year. This lake was built in 1901. Mr. Adams has been on it since 1940. He can tell you as well as I can, because he has on the lake, that if they do not dredge and remove the silt and sand, this report will probably be correct and it will be a zero lake.

So, what is the use of spending millions of dollars on a lake that eventually will dry up? We feel like the plan is wrong. We had a local plan to submit and the city council, the city of Wichita Falls, the mayor, all were opposed to the Holiday Creek plan. We proposed in 1980 to the city council—there was 1,700 petitions at Holiday Creek—to do it ourselves, to clean out the creek, to dredge it, use city crews, city equpment, and finance it through on a pay-as-you-go plan which we submitted to finance the project—that would be to take $1 million from the sales tax base excess which we have in this exhibit and $1.5 million from the revenue sharing and HUD block grant funds of $1 million.

On a 3-year basis, $3 million a year, our engineers say that they could clean the creek out, dredge it, and make it flow better into the Wichita River, repair the dam, leave the spillway where it is, and dredge it and clean it up where it would be a good viable lake for the entire area. It is 2,100 acres. We are trying to preserve the land and they want to reduce it down. That is why we are against it. We hope the committee will read the statement fully, look these exhibits over, and you will see that the city of Wichita Falls can finance this project by themselves if they want to. It shows a surplus that the city has—$5 million in 1980—and they finally are starting in the city of Wichita Falls—the city council in February of this year, appropriated several million dollars and they targeted some of this for the Holiday Creek work. They have already started. So we don't need Federal aid on this. Let the city do it and take care of it locally. We hope that you will consider this fact and cut this budget request out.

Senator KASTEN. Mr. Horany, we thank you very much for this information and the subcommittee will pay special attention to your exhibits and we will carefully analyze the need to fund this study. We thank you for bringing these questions to our attention. We thank you for your personal interest and for your participation here today.

Mr. HORANY. Thank you, Senator Kasten. If you need any information other than what we have submitted, feel free to call us.

Senator KASTEN. We thank you.

SUBCOMMITTEE RECESS

The subcommittee will now stand adjourned until 2 p.m. this afternoon in this room, 1318.

[Whereupon, at 11:37 a.m. the subcommittee was recessed, to reconvene at 2 p.m. the same day.]

(Afternoon Session, 2:30 p.m., Monday, March 30, 1981)

NONDEPARTMENTAL WITNESSES

HEARING PROCEDURES

Chairman Hatfield. The subcommittee will come to order. As has been our custom, we would appreciate very much if witnesses would summarize their written statements, highlight them as they desire.

The statements will be placed in the record in full and will be given careful scrutiny as we move to the markup of this bill. Due to the large number of witnesses who wish to be heard, it will be very important for us to be able to get all of them as many have traveled a long distance to be here today.

Papillion Creek and Tributaries Lakes, Nebraska

STATEMENT OF HON. HAL DAUB, U.S. REPRESENTATIVE FROM NEBRASKA

I would now like to invite Congressman Hal Daub of Nebraska to come and take the witness chair. We are very happy to welcome you here today, Congressman, and if you will invite those with you to take a seat at the table and proceed to introduce them. Welcome.

Mr. Daub. Senator Hatfield, thank you very much.

It is a real pleasure for me to have this opportunity, in fact I consider it a privilege, to testify before your subcommittee and thank you for this opportunity.

I will be very brief. This year, more than any other year, I recognize the difficulty facing your subcommittee in preparing an appropriations measure. I assure you that my testimony today is limited to, and in support of, the one most vital water project in my district. We have received your committee's continuing support year after year as we attempt to finally resolve the controversy. We will share part of the 5 minutes that we have been allotted with the opposing forces. Two weeks ago, these forces were brought together in one room for the first time in 14 years.

On March 14, 1981, the Papio Watershed Coordination Committee was formed. Representatives from 11 different groups were ready to demonstrate to the communities involved and to your subcommittee that they are ready to resolve this critical and long-standing problem of flood protection.

Having watched and participated in the PWCC's consensus reaching, I come before your subcommittee to heartily endorse their unanimous request to seek appropriation for a new study of the Papillion Creek and tributaries in Nebraska.

PREPARED STATEMENT

Recognizing the time limits involved, Mr. Chairman, I would ask that the rest of my testimony be submitted for the written record so that I may introduce Mr. Leo Hike, of the Papio Flood Protection Association; and Mr. Blase Cupich with the Sarpy County Board of Commissioners. It is my hope that their testimony can be given in the remaining time allotted to me.

[The statement follows:]

STATEMENT OF REPRESENTATIVE HAL DAUB OF NEBRASKA

Mr. Chairman, distinguished members of the subcommittee, I would like to thank you for this opportunity to testify before your subcommittee on the Papillion Creek and Tributaries, Nebraska project.

The Papillion Creek and Tributaries in Nebraska consists of 3 main branches: the Big Papillion Creek, the Little Papillion Creek and the West Branch of the Papillion Creek. Normally, the Papillion Watershed causes no problem as it runs through 3 counties. However, from 1929 to 1964 the Papillion Creek has flooded on the average of every three years, causing millions of dollars damage. The flood of 1964 was devastating, with 7 lives lost and property damage of almost $5 million.

After the 1964 flood, governmental entities and citizens groups banded together in an effort to provide the needed flood protection in the Papillion Watershed. As a result of their efforts, the Papillion Creek and Tributaries Project, Nebraska was authorized by P.L. 90-483 of the Flood Control Act of 1968. The project consisted of 21 separate dams in 3 different counties. Dams 1 through 9, 16 and 17 were designed to provide flood protection on the Big Papillion Creek; Dams 10 and 11 were to provide flood protection on the West Branch; and Dam 3A, conditionally authorized in 1976, would replace Dams 1 through 9.

Public opposition to the 21 dam project arose from property owners whose land was to be taken to build the project and also from surrounding land owners. Over 7800 acres of land were to be utilized in Washington County alone. The Papillion Valley Preservation Association was formed to oppose the project.

Although dams 16 and 17 began construction in 1972 and 1973 respectively, a halt to the project came in 1975 when a temporary restraining order was issued against the U.S. Army Corps of Engineers affecting dam 10. This injunction was granted because, according to the accompanying memorandum by the court,..."the agency decision in this case was to proceed with Dam 10 notwithstanding the Corps reevaluation of the remaining 17 dams. That a significant change in the remainder of the project is very likely, even probable, is readily adduced from the evidence...these factors persuade the court that the continuation of activity on Dam 10, while the remainder of the project is being reevaluated...is probably not within the congressional mandate..."

As a result of the public opposition and the temporary restraining order, Dams 1 through 9, 12,13,14,19 and 21 were reclassified to an inactive status in 1976.

Dam 20 did receive funds in the amount of $1,000,000 in FY 1981 for relocation and site preparation. I would urge today that continued funding be authorized in the amount of $5,000,000 for construction on Dam 20 and land acquisition on Dam 18. The completion of these two dams would reduce the flood threat in the West Branch of the Papillion Creek by about one-half.

We have been very lucky in the Papillion Watershed since 1964. Although minor flooding occurred in 1965, there has been no further flooding. This does not mean that a flood protection project is unnecessary. The history of the Papillion Watershed indicates that it is only a matter of time until a major flood will occur again. In fact, the danger of loss of life and property damage is greater now than ever before. There are now over 3500 residential units and 700 commercial and industrial units in the Papillion Watershed with an estimated value of $320 million.

That is why I invited representatives from 11 different governmental entities and citizens groups to a meeting on March 14, 1981 in an effort to resolve this 17 year problem of providing flood protection. Representatives from the County Boards of Commissioners of Douglas, Sarpy and Washington, the Mayors of Ralston, Papillio Omaha, Washington, and Bennington, the Papillion Flood Protection Association and the Papio Natural Resources Districtand the Papillion Valley Preservation Association met and formed the Papio Watershed Coordination Committee. The PWCC adopted a set of goals, purposes, and procedures, a copy of which is attached.

The PWCC then went about drawing up a resolution to present to your committee. The original proposed resolution of March 14, which is attached, was passed unanimously by the PWCC and was to be taken back to each members group for ratification. The resolution was requesting a new study of the Papillion Creek and Tributaries and stated in part, "...to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineer on Papillion Creek and Tributaries...to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention...to include approved channelization and other structured measures, including levees, dikes, diversions, and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21...and Dam 3A."

This resolution failed to pass all of the groups represented. However, on March 21, 1981, the PWCC met once again and amended the original resolution with the additional words,..."If no agreement on the study is unanimously reached by September 30, 1983 by the PWCC, then the Committee will support and pursue the deauthorization of the Papillion Creek and Tributaries, Nebraska with the exception of Dams 18 and 20."

The resolution of March 21, 1981 of the PWCC was adopted by the Douglas County Board of Commissioners, the cities of Bennington, Papillion, and Ralston and the Papillion Flood Protection Association.

The March 14, 1981 resolution of the PWCC was adopted by the Papio Natural Resources District.

The City of Omaha adopted the resolution of March 14, 1981 and added that they support the continued funding and construction of dams 18 and 20.

The Washington County Board of Commissioners, the City of Washington, and the Papillion Valley Preservation Association chose to adopt the resolution of March 14 and added that they support a halt to any further funding or construction of dams 18 and 20 until any such study by the U.S. Corps of Engineers is completed.

The PWCC therefore is unanimous in its effort to seek authorization of a new study of the Papillion Creek and Tributaries, Nebraska. The Army Corps of Engineers should be requested to work with the PWCC in an effort to develop a comprehensive, effective plan that is acceptable to all the members of the Papio Watershed Coordination Committee. This comprehensive review of the remaining elements of the authorized plan, including the conditionally authorized Dam 3A is desperately needed. An alternative plan that is both effective and implementable must be developed.

Item 10

PAPIO WATERSHED COORDINATING COMMITTEE

Goal - Purpose - Procedures
Adopted - 03/14/81

The goal of the PWCC is to secure a comprehensive plan for adequate flood protection of the Papio Watershed that:

1. Minimizes threat to life.
2. Minimizes land losses.
3. Minimizes losses of existing improvements.
4. Is compatible with soil conservation projects.
5. Encourages cooperation between public interest groups, NRDs and all government agencies involved.
6. Minimizes bank erosion.

The purpose of the PWCC is to:

1. Bring together local interest groups of the Papio Watershed in a coordinated effort to provide flood protection of same.
2. Provide necessary communications with those affected groups, agencies and individuals.
3. Be aware of the needs of the various interests on the Papio Watershed.
4. Serve as a forum for PWCC members to interchange ideas, suggestions and grievances.

The procedural format of the PWCC shall be:

1. Matters are to be decided by consensus.
2. Vote: one member, one vote. Alternates are permitted on a one time basis with an authorizing letter from the member.
3. Minutes are to be prepared and circulated to all members.

4. Taping of meeting permissable.
5. Meeting place - MAPA Board Room.
6. Meetings are to be open.
7. New media welcomed.

PROPOSED RESOLUTION OF THE PWCC

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

If no agreement on the study is unanimously reached by September 30, 1983 by the Papio Watershed Coordinating Commitee, the Papillion Creek and Tributaries, Nebraska, ~~will be~~ PWCC will pursue deauthorization with the exception of Dams 18 and 20.

Letter From Dan Lynch, Commissioner, Douglas County (Nebr.) Board

March 27, 1981

The Honorable Hal Daub
U.S. House of Representatives
1008 Longworth Building
Washington, D.C. 20515

Dear Congressman Daub:

As Co-chairmen of the Papio Watershed Coordinating Committee (PWCC), we would like to take this opportunity to provide you a preliminary report on the Committee's activities.

Representatives from eleven (11) different governmental entities and citizens groups affected by the Papillion Creek and Tributaries Project, Nebraska, were invited to attend our first meeting on Saturday, March 14, 1981, which you attended. These eleven represented the Counties of Washington, Douglas and Sarpy, the Cities of Papillion, Ralston and Omaha, the Villages of Bennington and Washington, the Papio Valley Preservation Association, the Papio Flood Protection Association and the Papio Natural Resources District. They voted to form the Papio Watershed Coordinating Committee. The Goal, Purpose and Procedures for the PWCC, a copy of which is attached, was also adopted.

At the conclusion of the first meeting, and after much discussion, a resolution was adopted by the PWCC that was to be taken back to each member group by the PWCC representative for ratification. This proposed resolution is attached. Another meeting was also scheduled for March 21, 1981.

During the week of March 16-20, several of the groups who were represented did in fact pass this original proposed resolution. Some of the others were unable to do so due to problems in setting up special meetings for their group. Four groups who considered the resolution failed to pass it as proposed. While there was no apparent problem with the intent of the resoltuion, that is to ask for a new study of the Papillion Creek and Tributaries, these groups wished to amend the resolution asking that any work on Dams 18 and 20 be held in abeyance until an acceptable alternative plan is recommended by the U.S. Army Corps of Engineers and deauthorization of the original plan is accomplished.

On March 21, 1981, the PWCC met for the second time. A revised resolution was adopted by the PWCC. The revised resolution, a copy of which is attached, was identical to the original resolution with these works added; "If no agreement on the study is unanimously reached by September 30, 1983 by the Papio Watershed Coordinating Committee, the Papillion Creek and Tributaries, Nebraska will support and pursue deauthorization with the exception of Dams 18 and 20."

Representatives from the Sarpy County Board, the Cities of Ralston and Papillion and the Papio Flood Protection Association indicated that they were able to support the resolution without a vote of their group. The other members all indicated that they must present the revised resolution to their respective groups for ratification.

At this point, we now have reports back from all of the member groups. The County Boards of Sarpy and Douglas, the City Councils of Papillion, Ralston and Bennington and the Papio Flood Protection Association have passed the PWCC resolution of March 21.

The Papio NRD passed the original resolution of March 14.

The Omaha City Council, while voting to support the need for a new study on the Papillion Creek and Tributaries, chose to adopt the March 14 resolution and added that they urge continued funding and construction of Dams 18 and 20.

The County of Washington, the Village of Washington and the Papio Valley Preservation Association have passed the March 14 resolution with the amendment that funding and construction of Dams 18 and 20 be held in abeyance until an acceptable alternative plan is recommended by the U.S. Army Corps of Engineers and deauthorization of the original plan is accomplished.

In essence, there is unanimous support that funds be appropriated for a new study by the U.S. Army Corps of Engineers to develop alternatives for the 21 dam project. The only real disagreement centers around the decision of whether funding and construction of Dams 18 and 20 should continue in the interim.

The PWCC stands ready to work with the Corps of Engineers in their effort to develop alternatives to the 21 dam project should funds be authorized. Flood protection in the Papio watershed must be forthcoming and we view this proposal as the most viable means of accomplishing this goal. We hope that a new study will result in a project that is both effective and implementable.

Sincerely,

Don Johnson
Chairman, Board of Directors
Papio Natural Resources District

Commissioner Dan Lynch
Douglas County Board

PAPIO WATERSHED COORDINATING COMMITTEE MEMBERS

Member	Representing
Don Johnson, Co-Chairman Valmont Industries Valley, NE 68046 359-2201	PAPIO NATURAL RESOURCES DISTRICT
Dan Lynch, Co-Chairman 1819 Farnam Omaha, NE 68102 444-7025	DOUGLAS COUNTY BOARD OF COMMISSIONERS
Mel Hoier Kennard, NE 68034 427-7342	PAPIO VALLEY PRESERVATION ASSOCIATION
Leo Hike 15402 S. Hwy 73-75 Omaha, NE 68123 291-4473	PAPIO FLOOD PROTECTION ASSOCIATION
Jim Knag RR 1 Ft. Calhoun, NE 68023 453-0947	WASHINGTON COUNTY BOARD OF COMMISSIONERS
Ray Lind Sarpy County Courthouse Hwy 370 & 84th St. Papillion, NE 68046 339-3225	SARPY COUNTY BOARD OF COMMISSIONERS
Mayor Joe Wager 8304 Park Drive Ralston, NE 68127 331-4836	CITY OF RALSTON
Mayor Mike Greco 724 James View Papillion, NE 68046 339-3237	CITY OF PAPILLION
Councilman Richard Takechi 1604 Farnam Omaha, NE 68102 341-3044	CITY OF OMAHA

Mayor Bill Bohn Bennington, NE 68007 238-2929	VILLAGE OF BENNINGTON
Mayor Eric Knudsen Washington, NE 68068 238-2413	VILLAGE OF WASHINGTON

PAPIO WATERSHED COORDINATING COMMITTEE

Goal - Purpose - Procedures
Adopted - 03/14/81

The goal of the PWCC is to secure a comprehensive plan for adequate flood protection of the Papio Watershed that:

1. Minimizes threat to life.
2. Minimizes land losses.
3. Minimizes lossess of existing improvements.
4. Is compatible with soil conservation projects.
5. Encourages cooperation between public interest groups, NRDs and all government agencies involved.
6. Minimizes bank erosion.

The purpose of the PWCC is to:

1. Bring together local interest groups of the Papio Watershed in a coordinated effort to provide flood protection of same.
2. Provide necessary communications with those affected groups, agencies and individuals.
3. Be aware of the needs of the various interests on the Papio Watershed.
4. Serve as a forum for PWCC members to interchange ideas, suggestions and grievances.

The procedural format of the PWCC shall be:

1. Matters are to be decided by consensus.
2. Vote: one member, one vote. Alternates are permitted on a one time basis with an authorizing letter from the member.
3. Minutes are to be prepared and circulated to all members.
4. Taping of meeting permissable.
5. Meeting place - MAPA Board Room.
6. Meetings are to be open.
7. New media welcomed.

Date of Proposal: 03/14/81

PROPOSED RESOLUTION OF THE PWCC

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

Date of Proposal: 03/14/81
Revised: 03/21/81

REVISED PROPOSED RESOLUTION OF THE PWCC

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587. If no agreement on the study is unanimously reached by September 30, 1983 by the Papio Watershed Coordinating Committee, the Papillion Creek and Tributaries, Nebraska, will support and pursue deauthorization with the exception of Dams 18 and 20.

March 19, 1981

RESOLVED by the Papillion Valley Preservation Association, Inc.

WHEREAS, a seven point agreement for resolution of the Papillion Valley flood problem has been agreed to by the Papillion Valley Preservation Association and the Papillion Valley Flood Protection Association, the County Boards of Douglas, Washington and Sarpy and the Papio NRD; and

WHEREAS, it appears necessary in order to accomplish said seven point agreement, that the Corps of Engineers be asked to recommend a comprehensive plan for flood prevention as an alternative to the construction of the dams authorized by the Flood Control Act of 1968, Public law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587.

The proposed resolution of the Papio Watershed Coordinating Committee, copy of which is attached hereto, is approved provided any action on acquisition or construction of Dams 18 and 20 be held in abeyance until an acceptable alternative plan of flood damage prevention is recommended by the Corps of Engineers, and Congressional deauthorization is accomplished of Dams 1 through 10, 12 through 15, authorized by the Flood Control Act of 1968, Public law 90-483, and also the deauthorization of Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587.

Signed by ________________________
Chairman of the Board

Minutes of
Papio Watershed Coordinating Committee
Meeting - 10:00 a.m. - March 14, 1981

This, the organizational meeting, was held in the Metropolitan Area Planning Agency Conference Room, 7000 West Center Road, Omaha, Nebraska.

Introduction was by Congressman Hal Daub with the following committee members present-

- -Don Johnson - Papio Natural Resources District
- -Mel Hoier - Papio Valley Preservator Association
- -Leo Hike - Papio Valley Flood Protection Association
- -Jim Knag - Washington County Board of Commissioners
- -Blase Cupich - Sarpy County Board of Commissioners
- -Dick Schoettger - Douglas County Board of Commissioners
- -Joe Wager - Mayor, City of Ralston
- -Mike Greco - Mayor, City of Papillion
- -Eric Knudsen - Mayor, Village of Washington
- -Richard Takechi - City Councilman, City of Omaha

Organizational activities
Motion, seconded and carried with unanimous vote on each motion-

Motion 1) - Don Johnson, Co-Chairman.
Motion 2) - Dan Lynch, Co-Chairman (if approved).
Motion 3) - NRD office to provide future secretarial and staff support.
Motion 4) - Corp of Engineers to provide review and study if requested.
Motion 5) - 9:30 a.m. Saturday, March 21, 1981 meeting for decision making relating to recommendation of committee.
Motion 6) - Appointment of Dick Schoettger, temporarv Secretary.
Congressman Hal Daub stated that Congress would hold committee meetings and hear any interested groups on approximately March 23, 24, 25, 1981.

The following resolutions were presented for consideration and vote.

Resolution A) - Motion and second-with unanimous vote for

PROPOSAL

The goal of the PWCC is to secure a comprehensive plan for adequate flood protection of the Papio Watershed that:

1. Minimizes threat to life.
2. Minimizes land losses.
3. Minimizes losses of existing improvements.
4. Is compatiable with soil conservation projects.
5. Encourages cooperation between public interest groups, NRD's and all government agencies involved.
6. Minimizes bank erosion.

Resolution B) - Motion and second-with unanimous vote for

The purpose of the PWCC is to:

1. Bring together local interest groups of the Papio Watershed in a coordinated effort to provide flood protection of same.
2. Provide necessary communications with those affected groups, agencies and individuals.
3. Be aware of the needs of the various interests on the Papio Watershed.
4. Serve as a forum for PWCC members to interchange ideas, suggestions, and grievances.

Resolution C) - Motion and second-with unanimous vote for

The procedural format of the PWCC shall be:

1. Matters are to be decided by consensus.
2. Vote: 1 member, 1 vote. Alternates authorized by member on a one meeting basis only.
3. Minutes are to be prepared and circulated to all members
4. Taping of meeting permissable.
5. Meeting place - MAPA Board Room
6. Meetings are to open
7. News Media welcome.

Resolution D) - Motion and second-Vote seven (7) for and three (3) opposed that at the March 21, 1981 meeting the following resolution be presented for review, discussion and action.

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE, that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document numbered 475, Eighty-seventh Congress, 2nd Session, House Document numbered 349, 90th Congress, 2nd Session, and other pertinent reports, to determine whether any alterations of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levies, dykes, diversions, and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

Congressman Daub said that every effort was made to assure that all positions of the community were equally represented on the committee. Note was taken that the following communities were interested and could be represented by the Counties.

-City of Bellevue
-City of Bennington
-City of Elkhorn

Congressman Daub pledged continued effort for this and next year, to work with the committee with the goal of an agreeable conclusion to all concerned.

Dick Schoettger
Temporary Secretary

Papio Watershed Coordinating Committee
Meeting Minutes
March 21, 1981

A meeting of the Papio Watershed Coordinating Committee was called to order by Co-chairman Johnson at 9:52 a.m. in the Metropolitan Area Planning Agency conference room, 7000 West Center Road, Omaha, Nebraska. The following committee members were present: Mel Hoier, Papio Valley Preservation Association; Leo Hike, Papio Flood Protection Association; Jim Knag, Washington County Board of Supervisors; Blase Cupich, representing Ray Lind, Sarpy County Board of Commissioners; Joe Wager, Mayor, City of Ralston; Mike Greco, Mayor, City of Papillion; Richard Takechi, City Councilman, City of Omaha; Bill Bohn, Mayor, Village of Bennington; Eric Knudsen, Mayor, Village of Washington; John D. Johnson, Co-chairman, Papio Natural Resources District. Absent was Dan Lynch, Co-chairman, Douglas County Board of Commissioners.

The minutes of the March 14, 1981 Committee meeting were approved by consensus.

The Chairman called upon each organization present to report on their position with respect to the proposed resolution of the Papio Watershed Coordinating Committee dated March 14, 1981. The City of Papillion, City of Ralston, Sarpy County, Papio Flood Prevention Association reported that they supported the resolution. The Village of Washington, Washington County Board, Papio Valley Preservation Association and the Village of Bennington reported that they favored the resolution with one suggested amendment. A copy of the PVPA suggested amendment is attached to the minutes. Councilman Takechi indicated that no action had been taken by the Omaha City Council. He reported that action was anticipated at the March 24, 1981 Council meeting following a public hearing. He noted that the language of the previous resolution by the Council is still applicable. It was reported that the Papio NRD supported the resolution. It was reported by Al Hogan that Douglas County had introduced the resolution at the last Tuesday meeting and discussed it but no action was taken.

There was then extended discussion regarding action which should be taken by the Papio Watershed Coordinating Committee on the resolution and amendments thereto.

Motion was made by Hoier and seconded by Knudsen to accept the original resolution with the additional condition that work on Sites 18 and 20 be held in abeyance until the Papio Watershed Coordinating Committee agrees on a plan. Voting yea were: Hoier, Knag, Bohn, Knudsen, Johnson. Voting nay were: Hike, Cupich, Wager, Greco, Takachi. The Chairman declared the motion failed because there was no consensus.

The motion was then made by Greco and seconded by Takechi to take the addition of the PVPA back to the organizations for approval or disapproval. The motion was withdrawn by Greco with the consent of Takechi.

There was then continued discussion on action on the resolution. A revised resolution was prepared and presented to the group for consideration.

Motion was made by Greco and seconded by Cupich to approved the revised resolution. The motion carried unanimously. A copy of the revised resolution is attached. The Chairman requested that those voting should indicate whether they needed to take this revision back to their organization for consideration. The following indicated that they would need to review the revisions with their organization: Hoier, Knag, Takechi, Bohn, Knudsen, Johnson.

Congressman Daub expressed his appreciation for the time and effort which the group has spent on this important matter.

The Chairman requested that a telephone solicitation be made on Wednesday, March 25, 1981, of those indicating that their organization would need to consider the action taken. The representatives should be prepared to indicate whether their organization supports the revised proposed resolution of the PWCC as attached hereto.

The meeting adjourned at 1:15 p.m.

FLOOD HISTORY

Occurrence Date Year	Month	Causative Factor	Relative Magnitude	Damage Historic Price Levels
*1929				
*1932				
*1936				
*1938				
*1941				
1943			Minor	$ 200,000
1948	July	Rainstorm	Major	Not Available
1950	July	Rainstorm	Moderate	Not Available
1959	August	Rainstorm	Major	$1,090,000
1960	June	Rainstorm	Moderate	$ 671,000
1964	June	Rainstorm	Major	$4,962,000
1965	September	Rainstorm	Moderate	$ 529,000

* Information not available for these flood events.

Flooding occurred in the Papillion Creek basin on an average of once every three years based on available data from records up until 1965. Since that time no flooding of any significance has occurred. This has resulted in some apathy. Flooding will occur again.

FLOOD DAMAGE POTENTIAL
(As of 1975)

	Little Papillion	Big Papillion	West Branch
Residential Units	1500	1700	300
Commercial and Industrial	200	250	250
Value	$ 130 M	$ 170 M	$ 20 M
Transportation Facilities	$ 14 M	$ 35 M	$ 24 M
Average Annual Damages	$290,000	$1,300,000	$550,000

AUTHORIZED PROJECT

The project consists of 21 reservoirs for flood control, water quality, recreation and fish and wildlife enhancement. Dams numbered 1 through 9, and 17 are located in the Big Papillion Creek basin; Dams 10 and 11 are located in the Little Papillion Creek basin; and Dams 12 through 15 and 18 through 21 are located in the West Branch of the Papillion Creek basin. Dams 3A, conditionally authorized in 1976 would replace dams 1 through 9.

CHRONOLOGY OF MAJOR EVENTS

- Papillion Creek project authorized by Public Law 90-483 of the Flood Control Act of 1968.
- Economic reevaluation of the authorized project conducted in 1971.
- Construction of Dam 16 was initiated in 1972.
- Construction of Dam 11 was initiated in 1973.
- The Flood Disaster Protection Act, Public Law 93-234 was passed in 1973.
- Acquisition of lands for Dam 20 was initiated in June 1974.
- A temporary restraining order affecting Dam 10 was issued against the Corps in March 1975.
- Plan evaluation report completed in September 1975. Recommended construction of Dam 3A in lieu of Dams 1 through 9.
- Dams 1 through 9, 12, 13, 14, 19, and 21 were reclassified to an inactive status in 1976.
- Dam 3A was conditionally authorized by Congress for Phase I investigations in 1976.
- In March 1980 a Joint Resolution identifying a 7-point approach to provide flood control in the Papio Watershed was signed by some local organizations.
- Funds in the amount of $1,000,000 were appropriated for Dams 18 and 20 in FY 81.
- In March 1981 the Papillion Watershed Coordinating Committee (DWCC) was formed.

CURRENT SITUATION

- Construction of Dams 18 and 20 would reduce the flood threat in the West Branch of Papillion Creek by about one-half.
- With Dams 11, 16, 18, 20 of authorized project complete essentially all of the flood problem within Big Papillion Creek, and approximately half of that in West Branch Papillion Creek would still remain.
- The remainder of the dams in the authorized project including the conditionally authorized Dam 3A, are currently either economically infeasible or highly controversial.
- A comprehensive review of the remaining elements of the authorized plan (including the conditionally authorized Dam 3A) is desperately needed. An alternative plan that is effective and implementable must be developed.
- At the earliest possible date, the Corps of Engineers should be requested to work with the newly created Papio Watershed Coordination Committee in an effort to develop a comprehensive, effective plan that is acceptable to all the members of the Papio Watershed Coordination Committee.

SEVEN-POINT AGREEMENT

Joint Resolution:

The Papillion Valley Preservation Association, Inc. and the Papio Flood Protection Association agree on the following approach to immediate efforts to provide flood control in the Papio Watershed (West Branch):

. Develop state legislation requiring control of water runoff in housing and/or commercial developments in the watershed.

. Promote the acceleration of PL 566 projects under the supervision of SCS and CAP projects of the Natural Resources District.

. Implement reasonable channelization measures to provide adequate runoff from the watershed.

. Continue enforcement of flood plain regulations by local units of government.

. Seek legislation bringing Dam 20 back to active status.

. Urge funding and construction of Dam 18.

. Deauthorization, by Congress, of the original Corps Papio Project and proposed Site 3A or a permanent injunction of all dams except numbers 18 and 20, 19 and 21.

PAPIO WATERSHED COORDINATING COMMITTEE MEMBERS

Member	Representing
Don Johnson, Co-Chairman Valmont Industries Valley, NE 68046 359-2201	PAPIO NATURAL RESOURCES DISTRICT
Dan Lynch, Co-Chairman 1819 Farnam Omaha, NE 68102 444-7025	DOUGLAS COUNTY BOARD OF COMMISSIONERS
Mel Hoier Kennard, NE 68034 427-7342	PAPIO VALLEY PRESERVATION ASSOCIATION
Leo Hike 15402 S. Hwy 73-75 Omaha, NE 68123 291-4473	PAPIO FLOOD PROTECTION ASSOCIATION
Jim Knag RR 1 Ft. Calhoun, NE 68023 453-0947	WASHINGTON COUNTY BOARD OF COMMISSIONERS
~~[illegible]~~ Blase Cupich Sarpy County Courthouse Hwy 370 & 84th St. Papillion, NE 68046 339-3225	SARPY COUNTY BOARD OF COMMISSIONERS

Mayor Joe Wager CITY OF RALSTON
8304 Park Drive
Ralston, NE 68127
331-4836

Mayor Mike Greco CITY OF PAPILLION
724 James View
Papillion, NE 68046
339-3237

Councilman Richard Takechi CITY OF OMAHA
1604 Farnam
Omaha, NE 68102
341-3044

Mayor Bill Bohn VILLAGE OF BENNINGTON
Bennington, NE 68007
238-2929

Mayor Eric Knudsen VILLAGE OF WASHINGTON
Washington, NE 68068
238-2413

PAPIO WATERSHED COORDINATING COMMITTEE

Goal - Purpose - Procedures
Adopted - 03/14/81

The goal of the PWCC is to secure a comprehensive plan for adequate flood protection of the Papio Watershed that:

1. Minimizes threat to life.
2. Minimizes land losses.
3. Minimizes losses of existing improvements.
4. Is compatible with soil conservation projects.
5. Encourages cooperation between public interest groups, NRDs and all government agencies involved.
6. Minimizes bank erosion.

The purpose of the PWCC is to:

1. Bring together local interest groups of the Papio Watershed in a coordinated effort to provide flood protection of same.
2. Provide necessary communications with those affected groups, agencies and individuals.
3. Be aware of the needs of the various interests on the Papio Watershed.
4. Serve as a forum for PWCC members to interchange ideas, suggestions and grievances.

The procedural format of the PWCC shall be:

1. Matters are to be decided by consensus.
2. Vote: one member, one vote. Alternates are permitted on a one time basis with an authorizing letter from the member.

3. Minutes are to be prepared and circulated to all members.
4. Taping of meeting permisseable.
5. Meeting place - MAPA Board Room.
6. Meetings are to be open.
7. New media welcomed.

FY82 CONSTRUCTION PROGRAM

. If $5 million is made available construction would continue on Dam 20 and land acquisition would be initiated on Dam 18.

. If $10 million is made available land acquisition for Dam 18 would be accelerated and construction would be initiated on Dam 18.

STATEMENT OF LEO HIKE, PAPIO FLOOD PROTECTION ASSOCIATION

Mr. DAUB. We also have with us Mr. Milton Fricke of the Sarpy County Citizens Group, and Mr. Allen Alts of the city of Omaha. If that is in order, we will conclude very rapidly.

Chairman HATFIELD. We are very happy to have their testimony.

Mr. HIKE. Mr. Chairman, members, I am Leo Hike, of the Papio Flood Protection Association, also on the PWCC that Congressman Daub just talked about.

With the action of Sarpy County floodplain regulations implemented over the years and brought to a public hearing April 15 at the planning board, and the recommendation for storm runoff regulation for commercial, industrial, and residential subdivision section of our zoning laws, we believe this will cover the four point and seven point regional agreement we had last year.

The PWCC has met and agreed to work with the group of the Corps of Engineers in redesigning the flood control features on the main stem of the Papio by various means that would be agreeable to anyone in the watershed, thus lifting the controversy that has kept this project from being completed over the past several years.

This, we believe, would complete the last of the three points of the agreement. So, we would ask you to approve the Corps' funding capabilities on the two dams and request funding for the redesign of the Papio project. We thank you for your time today and consideration.

Chairman HATFIELD. You are entirely welcome. Thank you very much for coming.

STATEMENT OF BLASE CUPICH, COMMISSIONER, SARPY COUNTY, NEBR.

Mr. CUPICH. Mr. Chairman, distinguished Members of the Senate, I will be brief.

My name is Blase Cupich. I wish to express our gratitude to you for granting us the opportunity to present testimony in regards to the Papio Creek flood control project. The flood of 1964, which was the devastating one, took about seven lives and caused about $5 million in damage, and is a vivid reminder of the urgency of this program.

We solicit your support. Thank you very much.

Chairman HATFIELD. Thank you, sir.

[The statement follows:]

STATEMENT OF BLASE J. CUPICH, COMMISSIONER, SARPY COUNTY (NEBR.) BOARD OF COMMISSIONERS

The Sarpy County Board would like to thank this Committee and Congress for moving ahead with Dams 18 & 20 on the West Branch of the Papio, which is so vital for flood protection through Millard, Papillion and most of Sarpy County.

This will provide protection through the area that suffered most of the damage and loss of life in 1964 when nearly 5 million dollars in damages and 7 lives (three of them young children) were lost to the fast raising, wide spreading and uncontrollable waters of the West Branch.

We were a party of the seven point apreement that was worked out last year in an effort to find a workable plan to control the flood waters over the whole Papio Creek Watershed. We believe that there has been a great deal of accomplishment in the past year with this plan, i.e.:

(1) The County Zoning Board will hold a Public Hearing April 15 to strengthen its Subdivision Laws on Soil Erosion and Storm Water Runoff.

(4) We subscribe to this point and will continue implementing Flood Plain Regulationg.

(5 & 6)Were approved by Congress in 1980.

The Sarpy County Board is a member of the Papio Watershed Coordinating Committee which is asking for the Corps of Engineers to receive funding in order to study and recommend a plan that would be acceptable to everyone in the Watershed. This study would be done while work continued on dams 18 & 20 and would be completed within 2 years. If this could be done it would complete Points (2), (3) & (7) of our joint resolution of last year.

We would appreciate very much your continued support in helping us solve a problem that is of such a vital interest to Sarpy County.

PROPOSED RESOLUTION OF
THE PAPIO WATERSHED COORDINATING COMMITTEE

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

If no agreement on the study is unanimously reached by September 30, 1983 by The Papio Watershed Coordinating Committee, the Papillion Creek and Tributaries, Nebraska, will support and pursue deauthorization with the exception of Dams 18 and 20.

DATED this 24 day of March, 1981.

Moved by Ray Lind and seconded by

that the above Resolution be adopted. Carried.

Yeas: Ray Lind

Nays: None

Chairman, Board of County Commissioners

RESOLUTION OF CITY COUNCIL OF OMAHA, NEBR.

WHEREAS, flood control and flood plain management procedures are of vital interest to the City of Omaha and the surrounding areas; and,

WHEREAS, the devastating flood of 1964 is a vivid reminder of the need for such measures which are in the best interests of the citizens living in such areas.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF OMAHA:

THAT, the City Council of the City of Omaha hereby supports the following efforts to provide flood control in the Papillion Creek Watershed:

(1). Develop State legislation requiring control of the water run-off in housing and/or commercial developments in the watershed.

(2) Promote the acceleration of PL566 projects under the supervision of the SCS and CAP projects of the Natural Resources District.

(3) Implement reasonable channelization measures to provide adequate run-off from the watershed.

(4) Continue enforcement of flood plain regulations by local units of Government.

(5) Seek legislation bringing Dam 20 back to active status.

(6) Urge funding and construction of Dams 15 and 18.

(7) Endorsement of Dams 19 and 21 in Sarpy County.

BE IT FURTHER RESOLVED:

THAT, this Resolution is not a commitment by the City of Omaha to participate financially in the development of recreational facilities adjoining these dams, however, the State of Nebraska, through its Game and Parks Commission, has expressed a willingness to develop recreational areas adjacent to such dam sites where local governments choose not to do so.

3CR:50

APPROVED AS TO FORM:

Asst CITY ATTORNEY

BOARD OF COUNTY COMMISSIONERS
SARPY COUNTY, NEBRASKA

RESOLUTION

WHEREAS, Sarpy County has been seeking flood relief, especially along the West Branch of the Papillion Creek Water Shed, since the 1964 flood which caused nearly 5 million dollars worth of damage to private and public property, and caused the deaths of seven children and adults, and

WHEREAS, in 1968 Congress authorized that there be 21 dams built to alleviate the flooding in the Papillion Creek Water Shed, and

WHEREAS, there have been only Dams # 11 and #16 completed by the Corps and #17 by a private developer before a controversy arose over which method, structure or non-structure, would best serve the public interest, between the Papillion Valley Preservation Association, Inc. and the Papio Flood Protection Association, and

WHEREAS, nothing has been accomplished over the past several years because of a lack of solid support for either one or the other of the proposals,

NOW, THEREFORE, BE IT RESOLVED, that the Board of Sarpy County Commissioners hereby endorse and support the attached resolution adopted jointly on March 17, 1980, by and between the Papillion Valley Preservation Association, Inc. and the Papio Flood Protection Association regarding flood control in the Papillion Water Shed.

DATED this 18th day of March, 1980.

Moved by ______ and seconded by ______

that the above Resolution be adopted. Carried.

Yeas: Ray Lind

Nays: None 90

MARY E. CONGER, COUNTY CLERK
SEAL

Ray Lind
Chairman, Board of County Commissioners

ATTEST: Mary E. Conger
County Clerk

BOARD OF COUNTY COMMISSIONERS, DOUGLAS COUNTY, NEBR.

Motion by Buglewicz; Seconded by Green

I move that this Board of Commissioners of Douglas County, Nebraska, hereby endorses and supports, in conjunction with the Sarpy County Board of Commissioners, the attached resolution adopted jointly on March 17, 1980, by the Papillion Valley Preservation Association, Inc. and the Papio Flood Protection Association regarding flood control in the Papio Watershed (West Branch).

ADOPTED: March 18, 1980
YEAS: Albert, Green, Lynch,
Buglewicz, Fellman

(CERTIFIED COPY)

Walter B. Spellman
COUNTY CLERK
AND
CLERK OF THE BOARD OF COMMISSIONERS

WASHINGTON COUNTY (NEBR.) BOARD OF SUPERVISORS

March 24, 1980

Motion by Robert Wilkins Seconded by John Lutz

I move that this Board of Supervisors of Washington County, Nebraska, hereby endorses and supports, in conjunction with the Sarpy County Board of Commissioners and the Douglas County Board of Commissioners, the attached resolution adopted jointly on March 17, 1980, by the Papillion Valley Preservation Association, Inc. and the

Papio Flood Protection Association regarding flood control in the Papio Watershed (West Branch).

ADOPTED:

YEAS: Six NAYS: 0

Adopted this 24th day of March, 1980.

Jack P. Jensen

Jack P. Jensen, Chairman
Washington County Board of Supervisors

JOINT RESOLUITON:

The Papillion Valley Preservation Association, Inc. and the Papio Flood Protection Association agree on the following approach to immediate efforts to provide flood control in the Papio Watershed (West Branch):

1. Develop state legislation requiring control of water runoff in housing and/or commercial developments in the watershed.
2. Promote the acceleration of PL 566 projects under the supervision of SCS and CAP projects of the Natural Resources District.
3. Implement reasonable channelization measurers to provide adequate runoff from the watershed.
4. Continue enforcement of flood plain regulations by local units of government.
5. Seek legislation bringing Dam 20 back to active status.
6. Urge funding and construction of Dam 18.
7. Deauthorization, by Congress, of the original Corps Papio Project and proposed Site 3A, except numbers 18 and 20, 19 and 21, or a permanent injunction of all dams except numbers 18 and 20, 19 and 21.

LETTER FROM JERRY R. WEHRSPANN, GENERAL MANAGER, PAPIO NATURAL RESOURCES DISTRICT

March 25, 1980

Mr. Leo Hike, Commissioner
Sarpy County Board of Commissioners
Courthouse - 84th and Hgwy. #370
Papillion, Nebraska 68046

Re: March 21, 1980 Board of Directors' Action on Papillion Creek Project

Dear Mr. Hike:

Reference is made to your request of March 24, 1980 for information on the action taken by the Papio N.R.D. Board of Directors on March 21, 1980 regarding the referenced project.

The draft minutes which will be considered at the next regular meeting contain the following amended motion which was adopted: 18 - Yea, 0 - Nay, 3 - Absent.

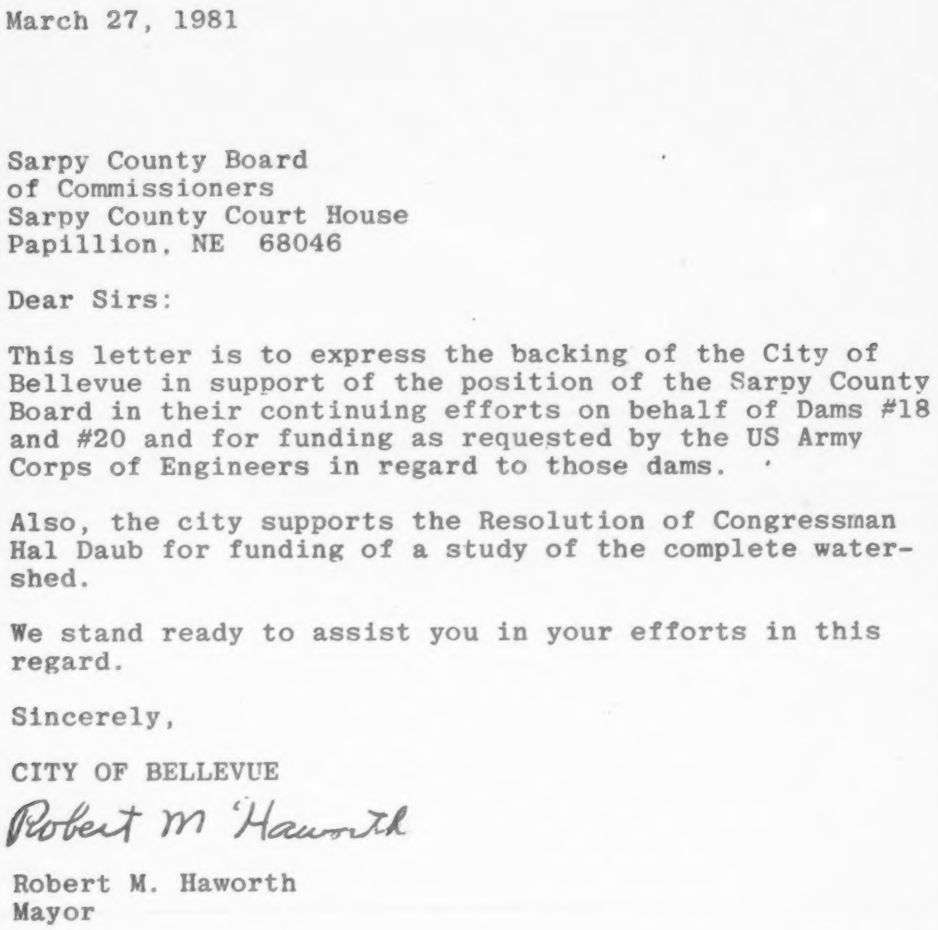
> Moved that the Board send an asking for Sites 18 and 20 and support the concepts of the seven (7) points in the PVPA/PFPA Joint Resolution.

I trust this provides the information you were seeking.

Very Truly Yours,

Jerry R. Wehrspann,
General Manager

LETTER FROM ROBERT M. HAWORTH, MAYOR, BELLEVUE, NEBR.



March 27, 1981

Sarpy County Board
of Commissioners
Sarpy County Court House
Papillion, NE 68046

Dear Sirs:

This letter is to express the backing of the City of Bellevue in support of the position of the Sarpy County Board in their continuing efforts on behalf of Dams #18 and #20 and for funding as requested by the US Army Corps of Engineers in regard to those dams.

Also, the city supports the Resolution of Congressman Hal Daub for funding of a study of the complete watershed.

We stand ready to assist you in your efforts in this regard.

Sincerely,

CITY OF BELLEVUE

Robert M Haworth

Robert M. Haworth
Mayor

STATEMENT OF MILTON FRICKE, PRESIDENT, PAPIO FLOOD PROTECTION ASSOCIATION

Mr. FRICKE. Senator Hatfield, my name is Milton Fricke. I have been before you often. I will be very brief. I have a statement to hand in.

I am primarily asking you for funding for construction to continue on the dam.

Chairman HATFIELD. Thank you, Mr. Fricke, your entire statement will be placed in the record.

[The statement follows:]

STATEMENT OF MILTON FRICKE, PRESIDENT, PAPIO FLOOD PROTECTION ASSOCIATION

Mr. Chairman and members of the subcommittee, I am Milton Fricke of Papillion, Nebr., president of the Papio Flood Protection Association. I have appeared before you in years past as chairman of the Papio Natural Resources District and before that as chairman of the Papio Watershed Advisory Board.

My testimony is brief. I will not repeat details presented in previous years which are in your committee files.

Our organization favors construction of dams 18 and 20 by the Corps of Engineers on the West Branch of Papillion Creek in Nebraska. When I testified before this committee in 1976, we estimated that $213 million of improvement were subject to flooding on the West Branch. This total has grown sharply in the 5 years since that calculation. And the need for the dams has grown as well. Even though local units of government have enacted flood plain zoning control laws, there is a large flood-prone area where industry and family dwellings exist—vulnerable to extensive damage until the dams are built.

First steps have been taken to provide flood protection in what is one of Nebraska's fastest growing areas. The Federal Government already owns the land for dam 20. Detailed planning has moved ahead in recent years so that actual construction is ready to go.

We urge that the Corps of Engineers be funded to the fullest capacity to move forward on these two dams. We understand the Corps is asking $5 million for the next fiscal year but that it has the capacity to utilize $10 million on this project.

Our association requests the fullest possible funding.

STATEMENT OF ALLEN ALTS, PLANNING DIRECTOR, CITY OF OMAHA, NEBR.

Mr. DAUB. Allen Alts, city of Omaha.

Mr. ALTS. I am Allen Alts, planning director for the city of Omaha, and I am here representing the mayor, who could not be here because he is standing for reelection next week. But I am here and I support the previous testimony and want to testify in support more particularly of the funding for the dams 18 and 20. Dam 18 will provide a great deal of protection to one of our satellite communities, Millard, and our Leaver Airport for the metropolitan airport authority and we are very anxious now that the compromise is being reached to have the funding proceed ahead with both of these dams, and particularly dam 18.

Thank you.

Chairman HATFIELD. Thank you very much.

Mr. DAUB. I would summarize quickly by saying again, it is unique to bring everybody together finally after 14 years, and particularly to have the city of Omaha's testimony and support and that should we be successful with this modest amount for the redesign of the alternative plan, which the Corps believes they can accomplish in the next 12 to 18 months, then we will end up with a floodplain plan that will be far less costly to the taxpayers of this country than if we had gone ahead and built the originally designed plan which is now in controversy.

Chairman HATFIELD. Thank you. May I wish the mayor well next year.

Mr. DAUB. I am staying neutral in that, Senator. [Laughter.]

Senator Glenn, I am sure he understands.

Chairman HATFIELD. Nice to have all of you.

Mr. DAUB. Thank you very much. We appreciate your time.

Chairman HATFIELD. Nice to see you again.

NEBRASKA WATER RESOURCE PROJECTS

STATEMENT OF RANDY MOODY, DIRECTOR, MISSOURI MARKETING OFFICE, STATE OF NEBRASKA

Chairman HATFIELD. May I invite, please, Mr. Randy Moody, director of the State of Nebraska Office of Missouri River Marketing, to come forward.

Mr. MOODY. Thank you, Mr. Chairman.

Chairman HATFIELD. Mr. Moody, your entire statement will be placed in the record.

If you will proceed to highlight the major points, we would appreciate it.

Mr. MOODY. OK, I will do so.

Thank you for giving us the opportunity to present our views on the budget request for fiscal 1982 of the U.S. Army Corps of Engineers Missouri River Division. The reserve, marketing office is an agency of the State of Nebraska and we were created in July of this year to increase barge traffic, promote the economic development, encourage air modal cooperation in the transportation of commodities, and increase the awareness of potential shippers and the general public to the advantages of the Missouri River navigation.

In summary, we would like to see the Congress take two actions which we believe would enhance navigation on the 735-mile stretch of the Missouri River from Sioux City to the mouth at St. Louis.

First, the administration's budget request for operation and maintenance is $8.546 million. However, the Corps has expressed a capability for an additional $2 million for fiscal year 1982. We believe the appropriation of this additional money will return much more to the U.S. Treasury in additional revenues from increased use of the river by barge companies and will help make the river more attractive to potential shippers.

What this additional money would be used for would help take some of the problem areas out of the river. There are low spots in the river. Some bends are very sharp.

That is one of the areas identified by a lot of the barge companies that are keeping, really using the river to its full potential.

The second thing we would like to request is that language be included in the committee report on this energy and water development appropriations bill indicating that it is the intent of the Congress that consideration of additional construction work to finish the Missouri River bank stabilization and navigation project be included in the Missouri River Divisions plan for fish and wildlife mitigation.

This fish and wildlife plan is currently being prepared for submission to the Chief of Engineers in Washington and this will ultimately be submitted to the Congress for authorization. The idea behind this is that the Corps, for the first time this year, has not asked for construction money for the Missouri River.

However, some of the comments in a poll are in my testimony from the users of the river. They don't quite believe that the Corps is done yet, that there is not a 9-foot channel and the 300-foot-wide channel as authorized is not completed.

So the idea is to let the Corps take another look at this and we have identified some of the trouble spots and, hopefully, this can be combined with the mitigation plan and another authorization can be completed. So the river can finally be completed and it can become more attractive to Missouri shippers.

OPERATION AND MAINTENANCE COST-SHARING LEGISLATION

Chairman HATFIELD. Thank you very much, Mr. Moody.

Mr. Moody, do you have any thoughts on the cost-sharing of operations and maintenance work?

Mr. MOODY. I do. I have had an opportunity to look at the administration's plan as submitted this last week. A couple of things bother us. First of all, the Missouri River, as I mentioned, is a newly-developed river. We are just beginning to realize a potential, I think, a good potential, something like 3 million tons of commerce shipped on the river and there is a potential for 20 million tons.

If this plan is put into effect, as the administration has indicated in the fiscal year beginning in October, we think the barge companies will take their barges and move out of the Missouri River.

There won't be any shipping along the river.

Chairman HATFIELD. Where would they move?

Mr. MOODY. To the Mississippi.

Chairman Hatfield. And this will be applied to all the waterways? I am not sure it would just be applied to a selected few.

Mr. MOODY. They will be applied to all waterways, but I think the idea is some of the costs are going to be based upon the amount of revenue generated and, obviously, the Mississippi River has been a navigable river for quite some period of time.

There is a tremendous amount of commerce.

Chairman HATFIELD. They will be going where the market is?

Mr. MOODY. That is exactly right. I certainly don't have any objections to that, but I think that the Missouri River is like a feeder highway onto an interstate. During the latter part of the shipping season the Missouri River supplies about 40 percent of the water into the lower Mississippi..

Certainly, if there is no reason to keep the river open for navigation, there are going to be other demands for that Missouri River water.

Chairman HATFIELD. I hope you stay in close communication with the interests along the Columbia, because both the Columbia and the Missouri will be affected.

Mr. MOODY. We certainly will do that.

Chairman HATFIELD. Maybe we will have to unite our efforts to get a modification.

Mr. MOODY. I think that would definitely be a good idea. I think it really hurts. I think the proposal is rather short-sighted in that it neglects a lot of the competitiveness and some of the other things in giving the river a chance to develop to its potential.

So, a user charge probably would have to be phased in over a longer period of time on developing rivers. I think that would certainly be a way to go about it.

Chairman HATFIELD. Thank you very much, Mr. Moody.

[The statement follows:]

STATEMENT OF RANDY MOODY, DIRECTOR OF MISSOURI RIVER MARKETING OFFICE

Mr. Chairman, thank you very much for giving the Missouri River Marketing Office, an Agency of the State of Nebraska, an opportunity to present its views on the budget request for FY 1982 of the U.S. Army Corps of Engineers Missouri River Division.

In summary, we would like to see the Congress take two actions which we believe would enhance navigation on the 735 mile stretch of the River from Sioux City to the mouth:

1) The Administration's budget request for Operation and Maintenance is $8.546 million. However, the Corps has expressed a capability for an additional $2 million for FY 82. We believe that appropriation of this additional money will return much more to the U.S. Treasury in additional revenues from increased use of the River by barge companies and will help make the River more attractive to potential shippers and riverfront developers.

2) We would like to request that language be included in the Committee Report on this Energy and Water Development Appropriations Bill indicating that it is the intent of the Congress that consideration of additional construction work to finish the Missouri River Bank Stabilization and Navigation Project be included in the Missouri River Division's plan for fish and wildlife mitigation. This proposal is currently being prepared for submission to the Chief of Engineers in Washington for ultimate submission to the Congress for authorization.

Before I explain the two requests further, let me give you some background on the Missouri River Marketing Office.

Our Office is an Agency of the State of Nebraska created to accomplish four goals:

1) Increase Barge traffic on the Missouri River
2) Promote economic development along the River
3) Encourage intermodal cooperation in the transportation of commodities
4) Increase the awareness of potential shippers and the general public of the advantages of Missouri River navigation

To achieve those goals, the Missouri River Marketing Office has developed a comprehensive marketing plan assigning specific objectives to ten state agencies which have been formed into a Task Force on Increased Use of the Missouri River. Each agency has certain duties to perform by a specified date to help the MRMO achieve its four goals. The agencies working together in Nebraska are the Departments of Agriculture, Banking, Economic Development, Environmental Control, Roads, Water Resources, the Nebraska Energy Office, the Natural Resources Commission, the Policy Research Office and the Public Service Commission.

The impetus for this coordinated approach to increasing Missouri River traffic stems from a European marketing trip taken by Governor Charles Thone in the fall of 1979. While there, he observed the tremendous amount of commerce being moved on the Rhine River. Noting that many of the characteristics of the Rhine and the Missouri are similar, he became concerned about the lack of use of the Missouri for navigation.

For example, if you stand at one spot near the Rhine, you can see one tow go by every three minutes. If you stand at one spot of the Missouri, you will see one tow every three days. Average annual tonnage on the Missouri is about 3 million. The potential, according to the Corps, is 20 million tons per 8-month shipping season.

The MRMO was formed in the aftermath of a highly successful shippers' conference in Omaha in March, 1980, which drew in excess of 200 people. The MRMO has been in business since July, 1980. We recently finished a series of seven "Barge into a New Market" meetings in our State designed to bring potential river shippers together with barge line representatives. More than 300 persons attended those meetings and we're in the process of the all-important "follow-up" work to insure the interest isn't lost.

With the tremendous transportation problems that are chronic in our part of the country, it's a crime that the Missouri has not been more fully utilized -- not only to ship out grain, but to bring in raw products for manufacturing.

To bring Missouri River shipping up to its potential, we need the cooperation of the Corps of Engineers to improve the physical characteristics of the River. Time and again it is mentioned by barge company representatives that there are shallow spots in the River, that bends are too sharp and that other hazards prevent them from making a full commitment to increasing Missouri River use.

The MRMO recently asked several barge companies familiar with the Missouri River to comment on some of the problems. The following are excerpts from their letters:

"We, and I am sure others, have avoided Missouri River moves. The channel... is far below the standards of other rivers. It is a must that a 9 foot channel depth be maintained to guarantee navigation. Swift water, sharp bends, combined with the existing narrow channel spots make it nearly impossible to operate the River in anything less than perfect conditions. These conditions, as I see it, appear for a relatively short period of time each year." -- E. A. Carlson, President, Riverway Co., Minneapolis.

"... the U.S. Army Corps of Engineers needs to keep the banks and dikes up on the Missouri River so other barge companies can have a 9 foot channel to run." -- Jimmy Bryson, Port Captain, Huffman Towing Company, Clayton, Mo.

"There are several shallow spots on the river -- the Corps has all the exact locations -- and it would be helpful if we had a more consistent channel in those areas. Such might be provided by increasing dredging and possibly several more, properly placed, channel structures such as wing dams. Perhaps a detailed modeling of these areas... would be the best and cheapest way to experiment with solutions.

"As you may have heard, the Missouri River has a number of sharp bends. For example, the Kansas River bend (Mile 367) is very sharp and tight. There are several others like it upstream, but tows running further upstream are not as large, so those bends are not quite the problem. In other words, it would be most beneficial to do something about the sharp bends downstream from Kansas City." -- David J. Marshall, Manager of Special Projects, Alter Barge Line, Inc., Davenport, Ia.

"I feel the Corps has done very well. They are not finished, however, as they would have us believe. There are still trouble spots that can be eliminated." -- Captain Bill Beacom, Senior Missouri River Captain, Brent Towing Company, Greenville, Miss.

"1. Determine exactly where the problem areas are located as far as shallow areas and rock ledges are concerned and remove these areas.

"2. The bank stabilization program should be continued as far as maintenance and repair is concerned.

"3. Continued maintenance of all structures, navigation markers, crossing markers is an important item that should be included in budget appropriations.

"4. Last but not least, the Corps of Engineers and the Coast Guard need the proper funding to maintain repair and maintenance functions, limited new construction items and aids to navigation service on the Missouri River." -- John R. McKenzie, Executive Vice President, SCNO Barge Lines, Inc., St. Louis, Mo.

The Corps has identified how the additional $2 million would be spent should it be made available.

--	Channel monitoring equipment	$ 200,000
--	Develop and test special channel modification equipment	$ 500,000
--	Environmental notch program	$ 160,000
--	Hydrographic surveys and engineering studies	$ 240,000
--	Structural repair of dikes/revetments	$ 900,000
		$2,000,000

The MRMO believes the appropriation of the additional funds would go a long way toward beginning to solve some of the problems identified as roadblocks to increasing Missouri River shipping.

However, more can and needs to be accomplished in the future. Currently, the Kansas City and Omaha Districts of the Corps Missouri River Division are putting the finishing touches on a report which will recommend mitigation activities needed to be accomplished under the provisions of P.L. 85-624, the Fish and Wildlife Coordinating Act of 1958. Because of the damage done to fish and wildlife habitat due to bank stabilization and navigation construction activities, the Corps is required to prepare a plan for mitigating some of the negative impacts to fish and wildlife. After many reviews, this proposal will be submitted to Congress for authorization.

There have been several proposals upon which the public has had a chance to comment. These range from a $2 billion plan submitted by the U.S. Fish and Wildlife Service to a $17 million proposal -- one of several developed by the Corps. All would entail to varying degrees restoration and preservation of surface water and adjoining land in the Missouri River Valley.

It is the belief of the MRMO that the final plan should be combined with authorization for additional construction to improve Missouri River navigation.

Such a plan would satisfy environmental as well as developmental interests. I think we have a demonstrated requirement for both fish and wildlife mitigation and additional channel and bank stabilization construction.

To emphasize the need to combine both programs, I would request the Appropriations Committee include the following language in its report on the FY 82 Energy and Water Development Appropriations Bill:

"The Missouri River Division of the Corps of Engineers is requested to include in it report on fish and wildlife mitigation for the Missouri River proposals which would lead to the identification of needed construction work to improve navigation. These proposals would include recommendations for Congressional authorization of projects to bring the Missouri River to a level competitive with other comparable inland waterways constructed and maintained by the Corps of Engineers."

With this guidance from the Congress, I believe the legislative package ultimately submitted to the Congress will better address the total needs of the Missouri River for the future.

Thank you very much for your attention. I would be most happy to answer any questions.

ADDITIONAL PREPARED STATEMENTS

Chairman HATFIELD. I have received several communications from members of the Nebraska Legislature, which I will incorporate in the record at this point if there is no objection.

[The statements follow:]

STATEMENT OF STATE SENATOR JOHN DECAMP OF NEBRASKA

I am writing you in support of the O'Neill Unit, Pick-Sloan Missouri Basin Program, to urge continued funding for this important project. The majority of lands to be irrigated by the O'Neill Unit are located in my 40th Legislative District where substantial groundwater declines have occurred in recent years.

The people of the O'Neill project area in 1979 twice voted overwhelmingly in support of the project when they ratified reclamation district and irrigation district contracts. A sizeable number of acres to be served by the project are not now able to obtain water for irrigation, and recent studies indicate that if the O'Neill project is not built, a substantial portion of the area of Holt County may have to revert to dryland farming in the future. The consequences on the economy of a significant rural area of Nebraska would be devastating.

The O'Neill project has been delayed several years by court litigation brought by environmental groups. However, the environmental aspects of the project have been adequately addressed to the satisfaction of the federal court. The only remaining issues on which studies have now been completed are dam safety and alternatives to the project. We anticipate they will be accepted by the court and the injunction against construction will be lifted later this year. Thus we will need the funding included in the Fiscal 1982 budget so that construction can resume early next year.

The O'Neill project is important to my district, to the State of Nebraska, to the region, and to the United States. In 1977 alone, Nebraska's contribution to U.S. grain exports was nearly $1 billion. Surely that helped all Americans and all consumers in its impact on lessening the U.S. balance of trade deficit and helping to check further erosion of the American dollar.

I urge you to support continued funding for the O'Neill project.

STATEMENT OF AL NARJES, CHAIRMAN, NEBRASKA NATURAL RESOURCES COMMISSION

This is to advise you that the Natural Resources Commission, the Nebraska agency responsible for long-range water planning is in full support of construction of the O'Neill Unit. We feel that capture and use of surface water is an important part of our water management activity.

The demonstrated irrigability of much of the project area and the documented groundwater declines in part of the project area point to a need for integrated surface and ground water use. Surface projects such as this will provide both a more stable economic base and provide potential for future energy savings. In a state so heavily committed to agriculture as Nebraska the benefits of the project are of substantial statewide significance.

We urge continued congressional support of the project.

This is to advise you that the Natural Resources Commission, the Nebraska agency in charge of long-range water planning is in full support of construction of the North Loup Project. We fully recognize the project will stablize and enhance the agricultural economy of a significant portion of Nebraska as well as providing certain flood control and recreation benefits.

We feel the North Loup Project is an essential link in the water development and management activities of the state and therefore support continued funding for the project.

OHIO WATER RESOURCE DEVELOPMENT PROGRAM

STATEMENT OF HON. JOHN GLENN, U.S. SENATOR FROM OHIO

Chairman HATFIELD. Senator Glenn, we are happy to welcome you to our committee and if you wish to invite your constituents who will be testifying to come to the table, this would be the time to do so.

Senator GLENN. Thank you very much, Mr. Chairman. It is an honor to be here with the committee today and a particular pleasure to bring before you today Dr. Robert W. Teater, a friend of ours for many years, and the spokesman for the State of Ohio on the fiscal 1982 budget request for water resources programs.

Dr. Teater is the director of the Ohio Department of Natural Resources, which means that among his other myriad of duties he has the primary responsibility for the conduct of the division of water.

Major State and regional water resources programs including the State water planning program, the coastal zone program, dam permitting and inspection, groundwater inventory, and floodplain management, all come under the jurisdiction of Dr. Teater's department and the division of water.

That represents but one of the 11 divisions and 8 offices for which Dr. Teater is responsible.

So, he does coordinate all of these activities together.

Dr. Teater is eminently prepared to review Ohio water resources matters for the subcommittee. He knows the requirements of our State in this regard, is highly aware of the need to continuously protect and develop the State's valuable water resources. I will leave specifics on the pending budget request as they pertain to the State of Ohio to Dr. Teater.

Bob, we welcome you.

STATEMENT OF ROBERT TEATER, DIRECTOR, OHIO DEPARTMENT OF NATURAL RESOURCES

Mr. TEATER. Thank you very much, Senator Glenn.

Senator Hatfield, again, we appreciate your courtesies and interest in hearing us out.

Chairman HATFIELD. Happy to do so. I might say to Senator Glenn, who is a very busy man, for this fine introduction, that I will treat you very gently and if he has to move onto other duties, you may feel free to leave, sir. I will take good care of your constituent.

Senator GLENN. Yes. We have about 10 pounds in a 2-pound sack around here.

Mr. TEATER. Thank you very much. We will be working with your office always. I will be very brief.

Water is extremely important to us in Ohio for flood protection, water supply, recreation, and navigation, both on Lake Erie and the Ohio River.

We are very concerned about the future of our State and the Nation as it deals with the water development. I am here to support the President's budget. We are not asking for any more money than that

$68 million total which is in the President's budget at this time for Ohio.

But we are vitally interested in protecting that budget as it flows through the House and the Senate. We work with the Corps of Engineers and with local communities throughout the State in developing these projects over the years, developing this budget, and we feel very comfortable with it. The State generally, throughout Ohio, has been participating in preparation of the budget and those projects are vital to us.

I might add that it seems that the sentiment in Washington now is for States to assume more responsibility in water development and we are prepared to do that. We would be happy to work with the Senate and with the administration in transferring more water development responsibility to the State and we are now putting major sums of money into many of the projects in Ohio.

If the Senate is looking for ways to save money in water development, I would recommend that we take a good, close look at the Water Resources Council, title I, title II, title III, specifically the river basin commissions, which I believe are not well serving the State or the Nation today.

I would like to introduce very briefly Bob Anderson, who is representing the Water Management Association here today and we have worked closely with them. He has about 30 seconds. That will conclude our testimony.

STATEMENT OF BOB ANDERSON, WATER MANAGEMENT ASSOCIATION

Mr. ANDERSON. Mr. Chairman, the Water Management Association of Ohio is an organization made up of approximately 3,500 members representing all aspects of water concerns in the State of Ohio and the Nation. We are working to meet the challenges of today and tomorrow and are directed toward sustaining long-term and consistently good water management.

We recognize the problem this committee faces, but respectfully request your favorable consideration of Ohio's minimal request and its recommendations.

Our board has reviewed, commented, and supported the request submitted by Dr. Teater. Again, we thank you for the opportunity to again appear for the State of Ohio.

RIVER BASIN COMMISSIONS

Chairman HATFIELD. We are very happy to welcome both of you gentlemen here.

Dr. Teater, I notice on page 2 that you are recommending termination of the river basin commissions.

Mr. TEATER. Yes.

Chairman HATFIELD. Did I understand you in your summarized statement that you also include a Water Resources Council in that termination recommendation?

Mr. TEATER. Yes, sir. I believe that the administration in policymaking of water in Washington has been diversified, decentralized—not decentralized but fragmented—over the years. I think we need central responsibility and someone that is responsible. We will be very happy to work on specific recommendations on that.

Chairman HATFIELD. I think you are being very generous and charitable with that kind of evaluation of their record. Thank you very much.

Mr. TEATER. Yes, sir. Very nice to be here with you.

Chairman HATFIELD. Nice to see you.

[The statement follows:]

STATEMENT OF DR. ROBERT W. TEATER, DIRECTOR, OHIO DEPARTMENT OF NATURAL RESOURCES

Mr. Chairman and members of the Subcommittee, I am Robert W. Teater, Director of the Ohio Department of Natural Resources and I am here representing the Honorable James A. Rhodes, Governor of the State of Ohio.

Water is our natural resource workhorse in Ohio. When properly developed and well managed, water is the lifeblood of our homes, our agriculture, and our manufacturing; it forms the main arteries of our transportation; it is the foundation for outdoor recreation.

When poorly managed, water is unnecessarily wasted and, during floods, it is a source of havoc.

Water development is essential for continued economic livelihood and sound national defense.

The Corps of Engineers' FY '82 Budget for Ohio provides an investment of almost 70 million dollars in the future of our state and nation. It includes water projects for navigation, flood control, erosion protection, and recreational development. We believe this is a sound investment of federal dollars in projects that will widely benefit society.

While we recognize there have been some cuts in water development, we are generally satisfied with the budget that has been proposed for Ohio. I am here today to support that budget and to be sure the water needs of the people of Ohio are given appropriate consideration. I am also here to assure this Subcommittee of our continued commitment to work with the Corps of Engineers and other federal water agencies to gain maximum benefits from all dollars invested in water development.

We are aware of the sentiments of the administration and some members of Congress to shift more of the costs and responsibilities to the states to manage water resources. We support this shift. However, the states cannot be expected to assume increased financial responsibility for water development based on a tax structure which, for Ohio, draws 73% of taxpayer's dollars to Washington, while only 16% goes to the Statehouse in Columbus.

Although we agree with proposals to shift more of the costs and responsibilities of water development to the states, we believe there exists a strong federal role in the continued development of projects for commercial navigation and comprehensive flood control. Navigation improvement projects, such as Gallipolis Locks and Dam on the Ohio River and Cleveland Harbor on Lake Erie, are not only of nationwide economic importance, but also vital to our national defense.

An organization called DINAMO (Association for the Development of Interstate Navigability on the Allegheny, Monongahela, and Ohio) has recently been formed to seek modernization of the outdated and antiquated lock and dam system in the upper reaches of the Ohio River Basin. Some of these structures are 75 years old and totally inadequate to handle modern waterborne commerce. This commerce is vital to the economic life of the region, as well as to the nation.

The federal government has a critical role to play in making these improvements and we urge the Subcommittee to favorably consider funding requests for these projects in the future.

Comprehensive flood control involving entire river basins, has properly been determined by the Congress to be of national interest. Projects in Ohio such as Logan and Nelsonville, long-awaited by the people of the Hocking Valley, have been funded in the FY '82 Budget and should be built as soon as possible.

To demonstrate Ohio's leadership and our commitment to share in the cost of water development, we have been cooperating with the Corps of Engineers and other federal agencies on a number of water projects. Last week, a check for $800,000 was delivered to the Buffalo District Engineer as the state's first installment on a $7 million dollar harbor of refuge project on Lake Erie at West Harbor. We have other critical projects on line and intend to fulfill our financial responsibility as the non-federal sponsor.

We recognize the sensitive responsibility this Subcommittee has in determining priorities for funding of water programs. We are also aware of the clamor to restore funds which have been cut from such entities as the Water Resources Council and river basin commissions. Ohio no longer actively participates in basin commission activities because we believe our state dollars can best be spent in bolstering the water management programs within the state. Therefore, if the Subcommittee is looking for ways to reduce overall expenditures, and at the same time preserve funding for effective water programs, we would recommend termination of funding for river basin commissions.

In conclusion, Mr. Chairman and members of the Subcommittee, let me say it is a privilege to appear before you once again and present Ohio's views on federal appropriations for water development. I have attached to my testimony a copy of the listing of Corps of Engineers' water projects for Ohio. We urge funding approval of these projects.

I would be happy to respond to any questions you may have.

Thank you.

PROJECT	TYPE OF PROJECT	SURVEYS	ADVANCE ENGINEERING AND DESIGN	CONSTRUCTION	OPERATION AND MAINTENANCE	TOTAL
OHIO						
ALUM CREEK LAKE, OH	FC			1,400,000	432,000	
ASHTABULA HARBOR, OH	N				402,000	
ASHTABULA HARBOR (DIKED DISPOSAL), OH	N				220,000	
ASHTABULA HARBOR, OH (MAJOR REHAB)	N			5,300,000		
BEAVER RIVER BASIN, OH & PA	FDP	150,000				
BERLIN LAKE, OH	FC				1,618,000	
CAESAR CREEK LAKE, OH	FC			1,100,000	312,000	
CENTRAL OHIO SURVEY, OH	FDP	240,000				
CENTRAL OHIO SURVEY AT LOGAN, OH	FDP	200,000				
CENTRAL OHIO SURVEY AT NELSONVILLE, OH	FDP	200,000				
CHILLICOTHE, OH	FC			6,600,000		
CLARENCE J. BROWN DAM, OH	FC				409,000	
CLEVELAND HARBOR, OH	N				7,412,000	
CLEVELAND HARBOR, OH (PHASE I)	N	202,000				
CONNEAUT HARBOR, OH	N				1,248,000	
CUYAHOGA RIVER BASIN, OH	FDP	50,000				
DEER CREEK LAKE, OH	FC				455,000	
DELAWARE LAKE, OH	FC				348,000	
DILLON LAKE, OH	FC				310,000	
FAIRPORT HARBOR, OH	N				865,000	

PROJECT	TYPE OF PROJECT	SURVEYS	ADVANCE ENGINEERING AND DESIGN	CONSTRUCTION	OPERATION AND MAINTENANCE	TOTAL
OHIO (CONTINUED)						
GENEVA-ON-THE-LAKE, OH (SEC 201)	N		150,000			
GREAT LAKES CONNECT. CHANNELS & HBRS, MI, IL, IN, MN, NY, OH & WI (SEE MICHIGAN)						
HURON HARBOR, OH	N				392,000	
LAKE ERIE WASTEWATER MANAGEMENT, OH, MI, NY, PA, & IN	SPE	348,000				
LORAIN HARBOR, OH	N	275,000			457,000	
MASSILLON, OH	FC				11,000	
MIAMI RIVER, LITTLE MIAMI RIVER, AND MILL CREEK BASIN, OH	FDP	350,000				
MICHAEL J. KIRWAN DAM & RESERVOIR, OH	FC				504,000	
MILL CREEK, OH	FC			7,000,000		
MOSQUITO CREEK LAKE, OH	FC				699,000	
MUSKINGUM RIVER RESERVOIRS, OH	FC				5,397,000	
MUSKINGUM RIVER LAKES, OH (REHAB)	FC			5,320,000		
MUSKINGUM RIVER LAKES, OH (DAM SAFETY ASSURANCE)	FC			2,400,000		
MUSKINGUM RIVER BASIN, OH	FDP	200,000				
MUSKINGUM RIVER BASIN AT MANSFIELD, OH	FDP	200,000				
MUSKINGUM RIVER BASIN AT KILLBUCK, OH	FDP	200,000				
NEWARK, OH	FC			1,871,000	11,000	

PROJECT	TYPE OF PROJECT	SURVEYS	ADVANCE ENGINEERING AND DESIGN	CONSTRUCTION	OPERATION AND MAINTENANCE	TOTAL
OHIO (CONTINUED)						
NORTH BRANCH OF KOKOSING RIVER LAKE, OH	FC				152,000	
OHIO RIVER LOCKS AND DAMS, IL, PA, IN, OH, WV, & KY (SEE ILLINOIS)						
OHIO RIVER MAIN STEM, IL, IN, KY, OH, PA, & WV (SEE ILLINOIS)						
OHIO RIVER OPEN CHANNEL WORK, IL, PA, IN, OH, WV, & KY (SEE ILLINOIS)						
PAINT CREEK LAKE, OH	FC				509,000	
POINT PLACE, OH	FC			3,050,000		
RENO BEACH - HOWARD FARMS AREA, OH	FC		100,000			
ROSEVILLE, OH	FC				11,000	
SANDUSKY HARBOR, OH	N				1,076,000	
TOLEDO HARBOR, OH	N				3,673,000	
TOM JENKINS DAM, OH	FC				194,000	
WEST FORK OF MILL CREEK LAKE, OH	FC				380,000	
WEST HARBOR, OH	N			1,600,000		
WESTERN LAKE ERIE SHORE, OH	FDP	100,000				
WILLIAM H. HARSHA LAKE, OH	FC			1,600,000	327,000	
WILLOW ISLAND LOCKS AND DAM, OH & WV	N			670,000		
TOTAL - OHIO		$ 2,715,000	$ 250,000	$ 37,911,000	$ 27,824,000	$ 68,700,000

NEBRASKA WATER RESOURCE PROJECTS

STATEMENT OF MILTON CHRISTENSEN, PRESIDENT, NEBRASKA ASSOCIATION OF RESOURCES DISTRICTS

Chairman HATFIELD. Mr. Milton Christensen. This is the Nebraska Association of Resources Districts. Is that correct?

Mr. CHRISTENSEN. Correct. Thank you.

Chairman HATFIELD. Welcome.

Mr. CHRISTENSEN. I appreciate the opportunity to appear before you.

Chairman HATFIELD. If you will summarize your statement, we would appreciate it.

Mr. CHRISTENSEN. I am president of the Nebraska Association of Resources Districts. As you notice in our testimony, Nebraska has long been concerned with the natural resources, primarily soil and water, in the State of Nebraska.

Most of our testimony is concerned with water projects at this point and having been faced with the energy crisis, I guess we feel we don't want to get our farmers caught between the rock and a hard spot in terms of water and energy.

We have basically four projects that we are concerned with, two of them in the Missouri River basin project, the O'Neill project, which is still awaiting final decision from the Federal courts.

We feel confident that that will be resolved favorably and that work can begin sometime in the next fiscal year.

The North Loup project has already begun to become a reality and we appreciate the continued support of that project.

Third, the Missouri River national recreation project which includes the river bank stabilization and demonstration project we feel is vital to the development of much needed recreation and also vital to what was alluded to before in the statements by Mr. Moody about the navigable aspect of the river.

So that would contribute to that project also. The Prairie Bend project along the Platte River in central Nebraska is a project which we feel is worthy of your support and appreciate the consideration of $1.5 million to get the study off the ground for them.

Another project that we are concerned about is the one in Colorado with the strategy that would also provide for us a little more stability in the flow of the Platte River. So we are interested in supporting that and even though it was long ago authorized, it still has to be gotten off the drawing board.

Finally, we are extremely interested in the funding that has been provided through title III for water planning activities and, as I said, water and soil are the life blood of the State of Nebraska and so we are very concerned that we maintain what we have in terms of quantity and quality. I appreciate the opportunity for appearing before you and if you have any questions, I would try to answer them for you.

Chairman HATFIELD. I have no questions, Mr. Christensen.

Mr. CHRISTENSEN. Thank you.

[The statement follows:]

Statement of Milton Christensen, President, Nebraska Association of Resources Districts

"In Nebraska...the resources of land and water are among the most extensive in the nation. Nebraska's past was built from the land and water and her future lies in their wise development and use. What then must be done to meet that future, not by chance, but by the design of our own choosing?

"Simply stated, there are four basic problems in our use of land and water: First, contrary to wishful thinking, Nebraska's natural resources are limited in amount compared to potential needs. There is not enough land and enough water for each of us to have all we might desire or to use as each might see fit - so we must share. Second, the natural resources occur not where man wills them, but where nature places them. Fertile soils and abundant waters by themselves offer little to man. It is their productive union that multiplies the value of each. Third, while the land is always with us, the rains have their own time. Flood and drought are different sides of the same coin. If water is to be of maximum beneficial use, it must be under control and available in time of need. Fourth and finally, water available where, when, and in the amounts required must be of a quality suitable for its intended use."

These words appear in the introduction to Nebraska's State Water Plan. That plan and its appendices outline presently available resources, outline potential projects and programs for proper utilization of Nebraska's land and water resources, and make a number of recommendations for modifications in policies and programs in Nebraska.

One of the recommendations of that State Water Planning effort was the creation of local units of government with a broad based responsibility for management of the state's water and related land resources. Those units, created in 1972, are today known as natural resources districts. I am here today representing the State Association of those districts. Our natural resources districts are responsible for a great many programs and projects in the state water and land resources business and work closely with other governmental entities in Nebraska at the local and at the state level responsible for water and land resources programs.

We appear here today in support of several specific activities which have provided federal assistance to Nebraska in its efforts to properly manage and utilize our precious natural resources.

First, we are here to support an appropriation for funding the O'Neill Unit of the Missouri River Basin Project. We recognize that that project is still awaiting a final decision in the federal courts, but would anticipate that with a conclusion of that action, some construction activities can be undertaken during the next fiscal year. Our organization has long supported the need for the O'Neill Unit whose primary function would be the irrigation and supplemental service of water on 77,000 acres of land in Keya Paha and Holt Counties in Northcentral Nebraska. Conjunctive use of ground and surface water in areas of Nebraska where that is possible can undoubtedly assure a more sustained and successful agricultural economy for this state, and we believe that the O'Neill Project can provide such an effort.

Second, we wish to express our continued support for the North Loup Division of the Missouri River Basin Project located in Central Nebraska along the North Loup, Calamus, and Loup Rivers. That area is now predominantly supported by agriculture and associated businesses, but can reach its full potential in that part of the state only if adequate water supply is made available.

Third, the Association would like to support the funding for the Missouri National Recreation River Project. During the last several years, Nebraska's local and state government have been involved in the Missouri River Bank Stabilization and Demonstration Project along the river from Gavins Point down to Ponca, Nebraska. We would consider inclusion of $2.3 million for construction funding and $160,000 for operation and maintenance as proposed by the Corps of Engineers to be a continuation of that bank stabilization project, and feel it would provide some much needed protection to the lands along the river in that reach as well as provide for improvement in public access to a potentially outstanding recreation resource.

Fourth, our Association will be supporting the authorization for feasibility study of the Prairie Bend Project along the Platte River in Central Nebraska. We feel that funding for that project will be appropriate beginning in fiscal 1983, and at that time will be supporting a three-year study effort with a total cost of $1.5 million. The Prairie Bend Project is one that has been supported by the State of Nebraska as well as the Missouri River Basin Commission which has recommended feasibility study authorization for the last several years.

Yet another project which we as an Association of Natural Resources Districts in Nebraska would like to support is the Narrows Project in Northeastern Colorado. Although Narrows is a project which would provide supplemental irrigation water supplies for Northeastern Colorado, in our opinion, it will provide downstream flood control benefits to Nebraska interests as well as return flows to the river which can benefit Nebraska's downstream interests as well. We would be interested in supporting an authorization for a new construction start of the Narrows Project, one which has been long delayed since originally authorized for construction by Congress.

Lastly, our natural resources districts have a great deal of concern for recommendations by the Administration which would apparently significantly curtail, if not eliminate, state water planning funding for the future. Nebraska has been a state which has made substantial use of Title III funding for state water planning activities and, as such, has developed a sound water planning and review process. Local and state water planning is the foundation upon which all water and land resources project and program activity must be founded. No matter what becomes of regional planning commissions and federal Water Resources Council programs, continued federal financial assistance to the states and, perhaps, even to local units of government carrying out proper comprehensive water planning activities must not be eliminated.

Many thanks for this opportunity to appear before your Committee to express our organization's support of strong federal input into the investment this country must make in our water and related land resources. The future of this nation does indeed rely upon the proper utilization of its basic natural resources.

ATTEMPTED ASSASSINATION OF PRESIDENT REAGAN

Chairman **HATFIELD**. I appreciate it. I am a little shocked here that an attempt has been made on the life of the President just now down at the Hilton Hotel, five or six shots were fired at President Reagan. Two Secret Service agents and his Press Secretary, Jim Brady, have been wounded. But the report says the President was not hit.

Mr. **CHRISTENSEN**. Where was this?

Chairman **HATFIELD**. At the Hilton Hotel.

MISSOURI NATIONAL RECREATIONAL RIVER

STATEMENTS OF:

EARL ROWLAND, NEWCASTLE, NEBR.

DARRELL CURRY, NEWCASTLE, NEBR.

Chairman HATFIELD. Mr. Earl Rowland, Mr. Darrell Curry, Newcastle, Nebr.

Mr. ROWLAND. Thank you, Senator Hatfield, for giving us a chance to appear before you.

Chairman HATFIELD. We are happy to have you here.

Mr. ROWLAND. We have pretty well briefly summarized this in our testimony. We will try to cut it down a little more. We are with the Missouri Bank Stabilization Association and we are testifying on behalf of the Missouri national recreation river project. This is one of the only free-flowing stretches of the river left and there are very many navigable pristine valleys along the river that we would like to see saved.

Money was put into the Corps budget this year in the amount of $2.3 million for construction and $150,000 for operation and maintenance.

The Office of Management and Budget decided to delete this portion. We failed to understand why they considered it a new start when almost $6 million has already been spent for bank stabilization under section 32, Stream Bank Rivers and Control and Demonstration Evaluation Act, which was only a forerunner beginning with the recreation river designation development. There has been about $600,000 spent in planning prior to construction on this designation.

I would hate to see this project not funded this year, because many of these projects were originally started by the farmers themselves, the people that own the land along the river, and the environmentalists were invited in to participate in it. There has been almost 100-percent cooperation. It is one of the most unique projects in the United States because it includes bank stabilization in a scenic recreation river designation which has never been done before.

We have total cooperation in it. Many of the landowners participate in this program and, due to the escalating cost of production and taxes, we are liable to lose them if something isn't done in the near future. There was a study team comprised of Federal, State, county, and local agencies, as well as environmental groups and farmers, in drawing up this plan.

So there won't be any problem in the future. There is very little public access along the river. This will provide some public access and preserve some of the natural areas along the river.

With that, we will let you read the rest of the testimony. If you have any questions, we would be more than happy to answer them.

Chairman HATFIELD. Thank you very much. I appreciate your coming today and to add to our testimony.

[The statement follows:]

JOINT STATEMENT OF EARL ROWLAND, PRESIDENT, AND DARREL CURRY, VICE PRESIDENT, MISSOURI RIVER BANK STABILIZATION ASSOCIATION

I appreciate the chance to appear before you on behalf of the Missouri River Bank Stabilization Association to testivy regarding the FY 1982 budget. I would like to speak in behalf of funding for the Missouri National Recreation River project. This is a 59 mile stretch of the Missouri River between Gavins Point Dam, South Dakota and Ponca, Nebraska. The title "Recreation River" is misleading as the main purpose of this designation is to preserve the natural condition and pristine values of the river along with providing some additional public access sites. Much of the money will be spent doing bank stabilization and purchasing scenic easements to save the remaining woodlands, wildlife habitat and scenic beauty along the river. The Corps of Engineers had requested 2.3 million dollars for construction and easements and $150,000 for operation and maintenance in the FY 1982 budget but the Office of Management and Budget deleted this portion, calling it a new start. We fail to understand why this was considered a new start when $5,743,000 has been spent on this reach for bank stabilization from 1976 through 1980 under the Section 32 Streambank Erosion Control and Demonstration Act which was only a forerunner and beginning for the Recreation River Designation and Development. Six hundred thousand dollars has been appropiated and mostly spent on the necessary studies and environmental impact statements to lead to further construction and purchase of easements. It could be disastrous to the whole project to stop funding at this time as many farmers who have saved their woodlands while working for this project will be forced to clear them due to escalating taxes and production costs. The uniqueness of this project alone has a high value. Whereas most scenic or recreation river designations are requested by environmental groups and a long hard battle is fought to obtain it. This designation request was led by farmers and landowners and the environmental groups were asked to join in and help to plan it which made it much easier to develop a good, sound, workable plan. Another feature is the bank stabilization which has never been included in a scenic or recreation river designation. This will add to the value of the project by protecting the easements that are being purchased. The type of stabilization developed through the Section 32 program is very acceptable, blending into the landscape to the point it is practically unnoticeable and in many cases adding to the fish and wildlife habitat. Much of the construction was done from floating plants thus saving more of the natural scenery. The farmers of Nebraska and South Dakota have contributed much to this work granting construction easements and land use preservation agreements without cost in the construction areas. A study team comprised of Federal, State, County and local agencies as well as environmental groups and farmers have worked for almost two years developing the ideas for the managing agency to use in their proposed plans. An advisory group consisting of the same people is being formed to help with future planning and work. The total cooperation shows the great interest and need for this project. The recreation part of the plan calls for outright purchase of a minimal amount of land to build small parking areas and boat ramps to give the public more access to the river. At the present time most of the access is privately owned and less available to the public. Funding of this project would provide a very desirable and long time effect in saving one of the few remaining natural areas and natural rivers in our nation so we would very respectfully ask that you consider the capabilities expressed by the Corps of Engineers in the amount of 2.3 million dollars for construction and $160,000 for operation and maintenance for the Missouri National Recreation River in FY 1982.

UPPER MISSISSIPPI RIVER PROJECTS

STATEMENT OF WILLIAM H. KLINGNER, PRESIDENT, UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

ACCOMPANIED BY:

DONALD C. McCONNELL, VICE PRESIDENT (MISSOURI), QUINCY, ILL.
WILLIAM J. PIEPER, VICE PRESIDENT (IOWA), WEVER, IOWA
JOHN KINSCHERFF, COMMISSIONER, SNY ISLAND LEVEE DRAINAGE DISTRICT, NEBO, ILL.

Chairman HATFIELD. Mr. William Klingner, president of the Upper Mississippi River Flood Control Association.

Welcome, Mr. Klingner.

Mr. KLINGNER. Mr. Chairman, it is a pleasure for our association again to appear before you. We have taken the liberty of filing a written report with you.

Chairman HATFIELD. It will be received and printed in the record.

Mr. KLINGNER. In the interest of expediting time, I would be the only speaker. However, for the record, I would like to present our witnesses that came with me.

Chairman HATFIELD. Yes; I would like to have them presented for the record.

Mr. KLINGNER. Donald C. McConnell, vice president from Quincy; William J. Pieper, vice president from Wever, Iowa; and John Kinscherff, commissioner, Sny Island Levee Drainage District.

Chairman HATFIELD. Welcome to all of you.

Mr. KLINGNER. We had one member who at the last minute had to cancel out, William Trent, Jr., the secretary from Muscatine, Iowa.

Chairman HATFIELD. My grandmother was a Trent. I think we might be relatives. Who knows?

Mr. KLINGNER. Senator, we might tell him.

We are privileged to have this appearance. We are sympathetic to the efforts of this committee and to the administration. There are a couple of items, however, in our request. I thought that we should point out that we refer to the first page of my written report, and you will note an item of $75,000 for initial planning for the Green Bay Levee and Drainage District No. 2. This is a project that grew out of the recent survey of the Mississippi River, Coon Rapids Dam, Ohio River levees review. And this area encompasses a very large chemical plant which the Corps of Engineers and the environmental people all thought was worthy of protection. It has run about a 5-year gauntlet through the various agencies and has recently been cleared.

We have a favorable report from the Board of Engineers Rivers and Harbors. It would be ready for initial planning. We would like to see that go forward because it has been a 5-year effort of cooperative endeavor between agencies, the Department of the Interior, the States of Iowa and Illinois, the Corps of Engineers, et cetera.

Incidentally, I would like to point out that this is one of the first projects in our area in which the States and the local sponsor were asked to participate. The State of Iowa did not have funds so the local interests have agreed to put up the 10 percent of construction costs if the project can be funded.

SNY ISLAND LEVEE AND DRAINAGE DISTRICT

The next item is the Sny Island Levee Drainage District. We would like to call that item to your attention. It represents $2,190,000 and that is for payment of seepage damages. For lack of any category, we understand the Corps placed it in a construction category. It has nothing to do with construction. It is a rectification of damage payment flowing out of the construction of the navigation dams; first authorization dates back to 1937.

Chairman HATFIELD. You are familiar that we included that in last year's Senate bill.

Mr. KLINGNER. I understand that.

Chairman HATFIELD. The House did not. It was dropped in conference. So, we are sympathetic.

I hope you put your sales pitch to the House, though, too.

Mr. KLINGNER. We are going to try to. If there are no questions I would like for the written statement to stand on its own merit.

There is one other request. I also filed a written statement from a Mr. Harvey Goodell. I filed it with the clerk.

Chairman HATFIELD. It will be placed in the record, too.

Thank you very much. Thank all of you.

Mr. KLINGNER. I overlooked one thing. I see Vicki Kessler from Senator Eagleton's office is here as well.

[The statements follow:]

STATEMENT OF H. L. GOODELL, SPARTA, WISC.

1. IDENTIFICATION

I retired in 1972 after a 50 year career, primarily on river engineering. (See Exhibit A. for brief resume). Since then I have been intensely involved as a public participant on studies of the Upper Mississippi river, and have attended over 100 meetings in the past 5 years. I was a member of 2 volunteer public Boards of Directors during the Great River Study (GRS) conducted by GREAT I*and GREAT*II; also a member of the Citizens Review Council (CRC) on development of the Master Plan(MP) for the Upper Mississippi River System (UMRS). The GREAT effort, and development of the MP are under the auspices of the Upper Mississippi River Basin Commission (UMRBC).

*GREAT is the acronym for the Great River Environmental Action Team.

2. UMRBC MEMBERSHIP

(a) Federal agencies:- Agriculture, Army,Commerce, EPA, Energy, FEMA, Health & Human Services, Hud,Interior and Transportation.

(b) States:- Illinois, Iowa, Minnesota, Missouri, North Dakota and Wisconsin.

3. GREAT MEMBERSHIP

(a) See page 4 of EXECUTIVE SUMMARY OF GREAT I, herewith.

(b) See page 4 of GREAT II EXECUTIVE SUMMARY herewith.

4. PERSONNEL

There were 10 Work Groups in GREAT I and 12 in GREAT II, each with a contractor coordinator for Public Participation. The Work Groups were heavily loaded with environmentalists, conservationists, biologists, sociologists, political scientists, geographers, planners, hydrologists and geologists. Members from the Corps of Engineers were outnumbered about 10 to 1.

5. POLICY OF AGENCIES DURING STUDIES

(a) GREAT:-

The policy (attitude relative to public input) is best paraphrased to be/have been the same as the motto of a bus company, i.e."LEAVE THE DRIVING TO US". A petition signed by 253 citizens praying that a GREAT designed study proceedure,(requiring construction) not be initiated, was denied on the allegation that it was in the "public interest". The project is adverse to the environment which includes the public interest. For the study to be productive, it would be necessary for gravity to be non-existant.

(b) UMRBC - DISCRIMINATION

There was/is indiscriminate discrimination in the management of the Public Participation program. On Oct.2, 1979, the Public Participation Work Team of UMRBC recommended a contract (grant)be entered into with a coalition consisting of the Environmental Center,D.C.,the Issac Walton League, D.C.,and Madison, WI,Regional office of the Sierra

Club to obtain input from those and similar organizations. On the same day a proposal from the Upper Mississippi Flood Control Association (UMFCA) was considered and tabled, and remains so today. UMFCA members are special municipalities organized and operating under the laws of the States in which located. Their officers are elected in accordance with the laws, have power of taxation and eminent domain.There are 85 such special districts located within the flood plains of the UMRS and their facilities protect a wide spectrum of our cultures, and have a total value of about 2 billion dollars. They are appropriately concerned about development and character of the Master Plan, and have exerted inordinate effort to participate, to no avail. UMRBC's recent response to inquiry as to the status of the proposal was "NO FUNDS".

(c) UMRBC - SECRECY

In June 1980 the PPIWT appointed a 100 member Citizens Review Council to function in a "delphi" process, i.e. to answer 4 rounds of questions formulated by PPIWT, and characterized it as being "anonymous". However, actually the names were kept "secret" by PPIWT during the 8 month question and answers period. The "secrecy" of the process inhibits debate and recognition of leadership within the citizenry. The concept of "one man,one vote" is applicable to elections of representatives, but not for weighing complex environmental phenomena. Sophistication, required to make wise decisions on river management, is available only to a small degree from the butcher, the baker and the candlestick maker, as usually found "on the street".

6. RECOMMENDATIONS BY GREAT

(a) The final report of GREAT I has 112 principal recommendations. (See Exhibit B 1/3 to 3/3). Attention is invited to B 3/3, particularly the total annual cost of about 62 million. Item 1 of B 2/3 is blank, but based on other agency information there is reason to believe this will be 8 million, making the total 70 million for maintenance of the system in GREAT I. (exclusive of O M & R for the locks and dams). This is at least 10 times the channel maintenance cost in 1974, the year the GREAT effort started. 1000% in 7 years equals an average of 140% per year - triple diget inflation and 10 times the rate for the economy. Some items have 4 digit inflation.The recommendations, if adopted would increase the an-annual cost about 63 million in GREAT I. Other information from GREAT I indicates that over a 40 year period, 400 acres will be environmentally protected, or 10 acres per year. That results in $6,300,000 per acre. Wet lands and terrestial habitat can be designed and constructed for 1/10 of 1% of that unit cost. If the Master Plan adopts the GREAT recommendations for the UMRS; by extrapolation, the increased cost of maintaining the UMRS would be 3/4 billion dollars, exclusive of OM&R for locks and dams. That would be equivalent to destroying a 100,000 ton cargo of an oil tanker every month.

(b) A DRAFT REPORT ON IMPLEMENTATION OF GREAT II RECOMMENDATIONS, BY THE Rock Island district, would increase the cost of channel maintenance nearly 10 million and nearly 10 times the 1974 costs. (See Exhibit C 1/2 and 2/2). There are 75 recommendations.

(c)UMRBC will no doubt adopt the GREAT recommendations in the Master Plan scheduled for delivery to Congress 1/1/82.

7. OTHER NATIONAL PROGRAMS

See Exhibit B 2/2 for:- DEMONSTRATION PROJECTS FOR STREAMBANK PROTECTION: ALSO LAKE REHABILITATION. Both are national programs and budget requests should be scrutinized thoroughly with the intent only to fund critical needs to protect property and navigation channels.

8. CONCLUSION

The above cases make up only a small sample of agency operations. It is recommended that the Committee adopt the following:-

(a) Postpone the funding of GREAT recommendations, and

(b) Do not recognize the Master Plan or provide funds for implementation of the Master Plan.(scheduled for presentation to Congress 1/1/82) and

(c) Limit funding of PROJECTS FOR STREAMBANK PROTECTION to those that are critically needed, and

(d) SUSPEND funding of LAKE REHABILITATION projects;and for (a),(b) & (c) above until all 4 categories can be evaluated by an Eminent Board and a report made to Congress.

9. EMINENT BOARD CONCEPT

It is recommended that Congress authorize an appropriate independent Commission,existing or otherwise to appoint Eminent Boards of 5 to 7 members, including 2 engineers (one having marine construction experience) all primarily from the private sector, from prioritized lists of nominees furnished by long established professional societies, to be available to agencies in the development and execution of plans for the management of water and land related resources, to do the following:-

1. To review Plans Of Study (POS) and offer advice in the development of plans; also monitor such operations.
2. Review drafts of final plans and suggest revisions.
3. Prepare evaluation reports (not excluding minority reports) of final plans to accompany agency reports to the decision making authority.
4. Review annual programs and budget requests in the same manner.

See Exhibit D for 17 items of additional explanation.

10. FINAL

All of the above is recommended/necessary to improve the decision making process in the management of our affairs, particularly those of water and land related resources. A continuing search for talent within the citizenry is necessary in the process of developing and managing resources. Otherwise public participation is merely an exercise resulting in Madison Ave. type brochures, unnecessarily large volumes of paper and inflationary appropriations.

RESUME OF CAREER

CITIZENSHIP:- Native born - Illinois

BORN:- 1902

EDUCATION:- B.S. in Civil Engineering, University of Illinois, 1925

SOCIETIES:- American Society of Civil Engineers - Life member.
National Society of Professional Engineers - Life member.

REGISTRATION:- Professional engineer and Surveyor in Wisconsin. Registrations in Alabama, Georgia, Illinois, Ohio. New York allowed to expire. Certificate from National Bureau of Engineering Registration.

EXPERIENCE

CONSULTING ENGINEERING FIELD:- 12 years of municipal, flood control, and local protection. (3 years as principal)

CONSTRUCTION INDUSTRY:- 19 years, 5 as construction engineer, and 14 as chief engineer for two companies of national reputation, primarily on river and harbor work but including power plants, heavy industry and large commercial buildings.

U.S. CORPS OF ENGINEERS:- 16.5 years on engineering and construction of navigation projects, flood control reservoirs, local protection and other river and harbor work.

DEPT. OF ARMY:- 2.5 years as Chief of Buildings and Grounds, Fort McCoy, Wis.

SEMI-RETIREMENT:- 5.0 years. (Active in public works projects, involving engineering.)

SUMMARY:-

Consulting field	12.0	years
Construction industry	19.0	"
U. S. Corps of Engineers	16.5	"
Dept. of Army	2.5	"
Semi-retirement	5.0	"
Total	55.0	years

.Oct. 1, 1979 addition:-

Member of Social and Environemntal Objectives Committee of the Water Resources Planning and Management Division of ASCE.

EMINENT BOARD CONCEPT

It is recommended that Congress authorize an appropriate independent Commission, existing or otherwise, to appoint Eminent Boards of 5 to 7 members, including 2 engineers (one having marine construction experience) all primarily from the private sector, from prioritized list of nominees furnished by long established professional societies, to be available to agencies in the development and execution of plans for the management of water and land related resources, to do the following:-

1. To review Plans Of Study (POS) and offer advice in the development of plans; also monitor such operations.
2. Review drafts of final plans and suggest revisions.
3. Prepare evaluation reports (not excluding minority reports) of final plans to accompany agency reports to the decision making authority.
4. Review annual programs and budget requests in the same manner.

EXPLANATION OF EMINENT BOARD CONCEPT

1. Legislation authorizing "Eminent Boards" would be necessary.
2. Guidelines would be necessary for the functioning of the Boards.

3. The advisability for the use of an "Eminent Board" for the preparation of any plan for resource development would be included in the authorized study, or could be authorized after preparation starts.
4. Each Eminent Board service would start with an authorization for a study/development and end upon submission of evaluation report of the agency final report,
5. Each Board would be a source of expert knowledge for an agency.
6. Each Board would be advisory as to the need, if any, for research, employment of consultants, or the need for any particular survey, investigation or study.
7. The Board would meet periodically, perhaps monthly or quarterly.
8. Each Board could ask the agency for documents, progress reports, etc.
9. Each Board would not be paid by the agency but by the appointed commission, indirectly by Congress.
10. Each Board would be a public participant (and a source of expertise) sanctioned/recognized by Congress.
11. Both an agency and each Board would be independent of each other.
12. The agency would have the opportunity to use the appointed Board.
13. Each Board would serve Congress (the public) but would have no authority over an agency. It would have the recognized right to provide input to an agency mission.
14. A Board would not be a substitute for consultants. However, its' input would probably and should result in more consultants, and an agency product that would be more cost effective.
15. The Board concept is not intended to replace "on the street"public participation but to supplement it by synthesizing and offering knowledge/experience/judgment available from the public.
16. Functioning of various Boards would probably greatly reduce the load and stress on Congressional committees and staffs, which may or may not be capable of evaluating voluminous reports and budgets, particularly on highly complex environmental phenomena. (In like manner this could also apply to the usual so called special interest groups).

STATEMENT OF WILLIAM H. KLINGNER, PRESIDENT, UPPER MISSISSIPPI FLOOD CONTROL ASSOCIATION

A Summary of our Member Districts' Project Status and requests is as follows:

SURVEYS	BUDGETED	REQUESTED	REMARKS
1. Great River Resource Management Study (GREAT II Rock Island District)	0	0	Fully funded
2. Mississippi River Coon Rapids Dam to Ohio River "Levee Projects Review"	$1,620,000	$1,620,000	To Continue Study
3. Green Bay Levee and Drainage District No. 2, Iowa	0	$ 75,000	Initiate Planning
PLANNING AND CONSTRUCTION			
4. Elsberry Drainage District Elsberry, Missouri	0	0	Fully funded
5. Sny Island Levee Drainage District, Illinois	0	$2,190,000	Agreement has been consummated between Local Interests and Corps of Engineers

Our Association is aware of the Administration's efforts to reduce the Federal Budget and realize that all of us must share in that endeavor if it is to be accomplished. We are in accord with the Administration's efforts. Each interest group has its own justification, and ours is no exception. Most of the programs and projects for Federal investment are worthy. The problem is one of priorities and funding within the guidelines of fiscal restraints as assessed in the National interest.

In that light, may we comment upon our modest requests in the hopes that it may assist your Honorable Committee and the Congress in making its determination of appropriate investments.

SURVEYS:

1. You will note that under the item "SURVEYS" we indicate that the Great River Resource Study (GREAT II) authorized under (P.L. 94-587) is fully funded.

On March 6, 1981, our Association received a copy of the GREAT II Main Report together with supplements, "A Channel Maintenance Handbook" and an "Environmental Report" for the purpose of review and comments by March 25, 1981. Due to the unavoidable time restriction, we were unable to respond to the invitation in a meaningful way, nevertheless, we are pleased that GREAT II has been completed and ready for review.

We do have some "tonque-in-cheek" reservations on some aspects of the Report and just how GREAT II, and for that matter GREAT I and III, will be implemented and utilized in the Master Plan now being prepared by the Upper Mississippi River Basin Commission under (P.L. 95-502).

One of our chief concerns is the apparent infatuation with dredge material disposal and recommendations as to appropriate disposal methods and sites.

The Master Plan for the Management of the Upper Mississippi River System now being prepared by the U.M.R.B.C. is a major thesis by itself and is, no doubt, inappropriate for discussion in this presentation except to say that our Association, as stated many times previously, is strongly in favor of a second Lock at (Lock and Dam #26), Alton, Illinois.

2. The "Mississippi River Coon Rapids Dam to Ohio River--Levee Projects Review" is fully funded and we urge your Honorable Committee to retain the budgeted amount.

Several of our Member Districts are under study at this time, namely the Fabius River Drainage District, Mo., the South River Drainage District, Mo., the South Quincy Drainage District, Ill., and the on-going studies in the Green Bay Levee and Drainage District No. 2, Iowa.

3. The Green Bay Levee and Drainage District, No. 2, Iowa, Levee Project, has run a five year gauntlet of review and has recently received a favorable report from the Board of Engineers for Rivers and Harbors.

Details are now being worked out between the various Governmental Agencies involved in order that initial planning may procedd.

The Corps of Engineers has expressed a capability of $75,000 to initiate planning for F.Y. 1982.

The Study was authorized by the Committee on Public Works of Congress, December 11, 1969. Many hours of effort have been expended by the Corps of Engineers, State and other Federal Agencies, as well as local interests in bringing this project to the planning stage. It would seem a great waste to further delay the project.

PLANNING AND CONSTRUCTION:

4. The Elsberry Drainage District Pumping Facilities and accompanying work is nearly completed and is fully funded. The levee improvement has been placed on deferred status.

5. In the matter of rectification of seepage damages in the Sny Island Levee Drainage District, the President's Budget for F.Y.1982 does not include funding.

The Corps of Engineers has expressed a capability of $2,190,000 to initiate and complete the project.

Our Association is fearful that the project may be considered as a "New Start" under the category of CONSTRUCTION and might be misleading to the Committee.

Actually, the sum requested is for a lump sum payment for seepage damages, plus an escalation inflation clause covering the period from the date of Agreement, January 1980, to the date paid.

Hence, funding of the amount requested has nothing to do with "New Starts" or construction. It is a payment for seepage damages sustained to agricultural land within the Sny Island Levee Drainage District adjacent to the Navigation Pools by virtue of the construction and operation of the 9 foot navigation channel on the Upper Mississippi River.

The Rivers and Harbors Acts of 1937, 1945 and 1958 provide the authority for the payment requested.

A tabulation of the pertinent acts relative to this matter is as follows:

(1) Rivers and Harbors Act of 1937, Public Law 392, 75th Congress, 1st Session, approved August 26, 1937

(2) Rivers and Harbors Committee, House Document 34, 75th Congress, 1st Session

(3) Rivers and Harbors Act of 1945, Public Law 14, 79th Congress, 1st Session, approved March 2, 1945

(4) Rivers and Harbors Act of 1958, Public Law 85-500, 85th Congress, approved July 3, 1958.

(5) Rivers and Harbors Committee, House Document 135, 84th Congress, 1st Session, dated April 13, 1955

(6) Section 10, Public Law 526, 79th Congress, 2nd Session, HR 6597, approved July 24, 1946.

(7) Public Works Appropriations Act of 1973, Public Law 92,405, approved August 25, 1972.

It is obvious that continued delay in the payment of damages can only result in a larger eventual payment by the Federal Government and continued hardship on the Drainage District and the landowners involved.

We sincerely trust that F.Y.82 will see the matter closed.

Thanks again for the courtesy of allowing our Association the privilege of presenting this statement.

PREPARED STATEMENTS

Chairman HATFIELD. Senator Durenberger has submitted a statement for the record on the Minnesota River Valley study; and Congressman Railsback has a statement for the record on projects in his district in Illinois.

Without objection, those statements will go in the record at this point.

[The statements follow:]

STATEMENT OF SENATOR DAVE DURENBERGER FROM MINNESOTA

I would like to address the need for funding of the Minnesota River Valley Interim Study, authorized by Congress in 1975 under Public Law 87-639.

This is an implementation study conducted by the Corps of Engineers and the Soil Conservation Service.

The Upper Mississippi River Basin Commission, in their Level A study completed in 1972, indicated further detailed studies would need to be made on the related land resource problem in the Minnesota portion.

Congress authorized the USDA to undertake a Type 4 study of the river basin in July 1970. As a result of this Type 4 study, a 4,183 square mile area was identified as an area that would have alternatives developed for solving water management problems. The result of this identification was the recommendation for the implementation study under Public Law 87-639.

This has local and state support. There is an advisory committee composed of local, state and federal representatives that provide guidance to the study and the Upper Mississippi River Basin Commission and the state of Minnesota has listed this study as a high priority since 1976.

Following are some facts about the area and the study -- and what has taken place up to the present time.

Upper Minnesota River Subbasins Study
(PL-87-639) Minnesota and South Dakota

* Minnesota's leading industry is Agriculture, ranking 6th in the nation in agricultural exports, and 6th nationally in overall crop production, 4th and 5th nationally in soybeans and corn respectively.

* The Minnesota River basin is in the heart of the corn and soybean production area of the state. Livestock production is also significant.

* The 13 county, 4,184 square mile Upper Minnesota River Subbasins Study Area in Minnesota and South Dakota includes some of the leading agricultural counties in Minnesota. The economy of this area is built on an agricultural base.

* Flooding damage in the total Minnesota River basin represents 35% of the total average annual flood damage statewide and is the highest flood damage area in the state. Within the study area, average annual flood losses are $13.3 million which includes damage to crops, soil erosion, transportation, urban and other agriculture related damages.

* "Crossover flooding" from one watershed to another occurs on an almost annual basis. Total flooding affects 208,000 AC. and 12 communities. The complexity of this problem requires close coordination of various technical disciplines as well as units of government to achieve solution. Technical expertise does not exist at the local and state level.

* Recognizing the need for a unique approach to find a solution for the problems within this area, the Governor of Minnesota requested, and the U.S. Congress authorized by resolution, the Upper Minnesota River Subbasins Study under the Authority of PL-87-639 in 1975.

* Acting on the Congressional mandate and on receipt of initial funding in FY 1978, the Corps of Engineers and the Soil Conservation Service began planning.

* Of a 3 stage process, a stage I Preliminary Alternatives Report was completed in January 1980. Current efforts center on data collections: topographic mapping, environmental studies, economic, engineering , hydrologic and hydraulic analysis.

* The estimated total study cost is $11.5 million (vs $13.3 million average annual flood damage). To date the Corps has expended $895,000 and the SCS $1.7 million. Study completion is scheduled for 1990.

* In support of the overall effort to control flooding in the study Area, the State of Minnesota thru grants to counties has contributed $1,205,000 for construction of flood control structures during the period 1976-1981, local governments have contributed over $300,000 to this effort. These projects were identified during past and ongoing study efforts.

* Strong support and active involvement at the local, regional, state and federal level exists as demonstrated by funding and the designation of this study as a top priority since 1977.

* A joint study effort between two federal agencies requires full commitment and funding by both parties to be successful and efficient. Funding problems for this study experienced over the past 3 years has delayed progress. For FY '79,'80 and '81 SCS has received 70%, 101% and 113% of programmed funding while the Corps has received 100%, 46% and 0% of needed funds for the same periods. FY '82 budget needs are $920,000 and $533,000 for the Corps and SCS respectively.

* State and local government have in good faith met their commitment. The Federal governments full support is required to meet its commitment and to complete its work as planned.

* Future delays caused by lack of federal funding will result in inefficiencies, outdating of data already collected, loss of coordination of ongoing state and local efforts, loss of technical manpower, the continued adverse effect of flooding and soil erosion on the agricultural economy at the local, state and national levels and jeopardizing the ability of this area to sustain much needed productivity in the future.

STATEMENT OF REPRESENTATIVE TOM RAILSBACK OF ILLINOIS

Mr. Chairman, Members of the Subcommittee, I want to thank you for this opportunity to present testimony on behalf of my constituents in the 19th Congressional District of the State of Illinois.

As you may know, my Congressional District is bordered by some 250 miles of rivers and contains 470 miles of rivers within its boundaries. This obviously means that farmers, businessmen, and other citizens are concerned by the ever-present possibility of floods and their accompanying devastating effects.

Although we are fortunate in that floods are not always an annual occurrence, we must not allow ourselves to become apathetic toward flood control projects during these welcome periods of reprieve. I want to thank the President for recognizing the continued need for such projects and for including most of the important projects for the 19th District of Illinois in his FY 1982 budget. I respectfully request the Subcommittee Members to approve these important items at the requested budgetary level.

There are some specific projects for which the Army Corps of Engineers has indicated a capability over and above the President's appropriations request. First, your approval for $300,000 to complete the planning for the Moline, Illinois flood protection project is most urgently needed. Without this funding, the Corps of Engineers will be unable to begin construction of the flood protection levee for the City of Moline (approximate population: 46,000) once "new construction funds" become available. Flood protection levees immediately to the west of Moline (Rock Island) and to the east (East Moline) are already completed or in the process thereof. The construction of the City of Moline link would mean the protection of over 110,000 persons and their properties. Your approval of the $300,000 will be a step toward the prevention of future flooding.

The Corps has also indicated that $288,000 will be needed to initiate and complete construction of the Savanna, Illinois small boat harbor. Since the effects of inflation and the need to conserve energy have forced citizens to curtail vacation travel plans, this small boat harbor will enable more people to enjoy the Mississippi waterway close to home. Your approval of the requested $288,000 would be most appreciated by my consituents as well as those citizens living in neighboring districts.

There are two other capabilities the Corps of Engineers listed under "Operation and Maintenance": the Illinois Waterway and the Mississippi River between the Missouri River and Minneapolis, Minnesota. I recommend that both of these be approved if we are to maintain the navigability of these two waterways. It is quite important that we prevent the deterioration of our locks and dams to the point that we are confronted with more situations similar to the current one at Lock and Dam 26. Continuous and constant maintenance of our locks and dams is most vital to an adequate and reliable waterways system. As you know, the availability of our rivers as supply lines for petroleum products, chemicals, grain, coal, and other important materials is of the upmost importance to both shippers and consumers.

Specifically, the capabilities for which I am respectfully requesting approval are $20,644,000 for the Illinois Waterway and $20,415,000 for the Mississippi River.

In an effort to provide you with a total overview of the current Corps of Engineers projects within my Congressional District, I am including a summary of all items for which FY 1982 funding is requested.

Again, Mr. Chairman, I thank you for the opportunity to present this testimony to your Subcommittee on behalf of my constituents.

OPERATION AND MAINTENANCE

Budget: $13,117,000; Capability: $20,415,000

The President requested $13,117,000 to perform maintenance work on the Mississippi River between the Missouri River and Minneapolis, Minnesota. Most of this work would be within the 19th Congressional District of Illinois. The monies requested would be used to keep the river adequately maintained for needed navigational purposes.

MISSISSIPPI RIVER, COON RAPIDS DAM TO MOUTH OF OHIO RIVER

Budget: $1,620,000; Capability: $1,620,000

The purpose of this study is to determine whether any modifications of existing projects should be made in the interest of providing increased flood control and for allied purposes. The study is primarily concerned with increasing the degree of protection in drainage and levee districts where extensive urban development has taken place in recent years. Also, additional funds are needed to study lowhead hydro-power-generating facilities. I respectfully ask Members of the Subcommittee to approve the capability of $1,620,000.

ILLINOIS WATERWAY, ILLINOIS

Budget: $12,401,000; Capability: $20,644,000

This item is discussed in the above text.

EAST MOLINE, ILLINOIS

Budget: $4,480,000; Capability: $4,480,000

This project will protect East Moline from flooding of both the Mississippi and the Rock Rivers. These funds will be used to continue construction of protective levees.

FULTON, ILLINOIS

Budget: $5,670,000; Capability; $5,670,000

This project will protect both Fulton and Cattail Drainage District. These funds will be used to continue the ongoing construction.

MILAN, ILLINOIS

Budget: $3,810,000; Capability: $3,810,000

This project will protect the Village of Milan and the Big Island Conservancy District from flooding of the Rock and Mississippi Rivers, and Mill, Kyte, and Eckhart Creeks.

SAVANNA SMALL BOAT HARBOR

Budget: $0; Capability: $288,000

This project is described in the above text.

MOLINE, ILLINOIS

Budget: $0; Capability: $300,000

This project will protect the City of Moline from flooding of the Mississippi River and is described in the above text.

ROCK RIVER AREAS, 1,2,3,4,&5

Budget: $250,000; Capability: $250,000

The project would consist of channel improvement, overbank clearing of trees and brush, and levees and appurtenant works, making this reach of the Rock River, in effect, a leveed floodway. The planning will be continued with these funds.

MILL CREEK AND SOUTH SLOUGH, ILLINOIS

Budget: $32,000; Capability: $32,000

The Mill Creek and South Slough project requires continued operation and maintenance expense to insure channel clean-out and snag-clearing to help prevent build-up and future flooding. The necessity for keeping this slough open is its use as an outlet for Milan's treated sewage which moves through Mill Creek and South Slough into the Mississippi River.

GENERAL REGULATORY FUNCTIONS

Budget: $1,034,000; Capability: $1.151,000

Funds are needed to perform regulatory functions such as issuance of permits to protect navigable waters in the District, which has expanded as a result of the realignment study.

INSPECTION OF COMPLETED WORKS

Budget: $166,000; Capability: $166,000

These monies are necessary to continue the on-going responsibility of inspecting flood protection levees.

LAKE MICHIGAN DIVERSION DEMONSTRATION STUDY

Budget: $0; Capability: $180,000

The study was originally authorized by Congress in the Water Resources Development Act of 1976 and it is my recommendation that the $180,000 be approved in order that the completed study may be presented to Congress in an expeditious manner. This money is being used for a demonstration and study of the feasibility of increasing the amount of water diverted from Lake Michigan at Chicago into the Illinois Waterway.

SUBCOMMITTEE RECESS

Chairman HATFIELD. The committee stands in recess until tomorrow at 10 a.m. in room 1318 of the Dirksen Building.

[Whereupon, at 3 p.m. Monday, March 30, the subcommittee was recessed to reconvene at 10 a.m. Tuesday, March 31.]

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS FOR FISCAL YEAR 1982

TUESDAY, MARCH 31, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m. in room 1318, Everett McKinley Dirksen Senate Office Building, Hon. Mark Hatfield (chairman) presiding.

Present: Senators Hatfield, Stennis, and Sasser.

NONDEPARTMENTAL WITNESSES

OPENING REMARKS

Chairman HATFIELD. The subcommittee will come to order.

This morning will be our final day of testimony from nondepartmental witnesses who are presenting views on a number of energy and water resource issues.

During our previous 10 sessions, this subcommittee has received testimony and statements from nearly 1,000 public witnesses. We have a large number of witnesses this morning and, therefore, according to the notification to each of the witnesses, we ask that everyone hold his or her oral testimony to a minimum in order that all may have an opportunity to be heard. We will receive your printed statements and place them in the record and we will give those careful review before the markup on this bill. Therefore, we would ask that the witnesses summarize or highlight the important points in their oral testimony so that all may be heard.

BIOMASS ENERGY PROGRAM

STATEMENT OF SANFORD HARRIS, CONSULTING ENGINEER

Chairman HATFIELD. I would invite first Mr. Sanford Harris, a consulting engineer, who will testify on biomass energy programs, to come forward.

Mr. HARRIS. Mr. Chairman, my name is Sanford Harris. I am a consulting engineer in Washington. Previous to this I served in the Government as Chief of the Biomass Branch, now a division, at the U.S. Department of Energy, and as Chief of Production and Supply for the National Alcohol Fuels Commission. Prior to Government service, I was 25 years in business and industry at the executive level. I was invited to testify today as an expert witness on the question of the future of the biomass program in a time of great budgetary restraint.

There is no need to enter into a litany of numbers and extrapolations which might impress and equally might obfuscate the issues. There is a need simply to provide a base of understanding.

Convention divides fuels into two types—low grade and high grade. The former are the solid fuels which are heavy, bulky, costly to transport, have large residues relatively, and may give up their inherent energy by burning, or they may be transformed into more concentrated fuels. High-grade fuels are usually gaseous or liquid. Their energy content by weight is high. They are easily transported; They can be used in many ways and leave little residue; All biomass may be considered a low-grade fuel in its natural or original state when dried, more or less.

The consensus has it that all biomass grown annually in the United States contains about 54 quads of energy. Known conversion technologies have efficiencies of between 5 percent and 50 percent, plus or minus. Therefore, if all that biomass were devoted to fuel production, if no high-grade fuels were used to grow, harvest, collect, deliver, and transport that biomass, the maximum total product would be between 3 to 25 quads. It isn't and it can't be, or we stop eating, building houses, and making paper. The 3 to 25 quads would be gross energy. That is what comes out without considering what went in to make it.

Deducting the energy cost from the energy product leaves something on the order of 0.5 to 2.5 as a low and 1 to 5 quads as a high. In fact, based on the mix of technologies used at this time, it is about 1.5 quads.

The chart attached to the written testimony describes this graphically. It is a good chart, made up from the best information available by a panel of objective people and is probably within 15 percent of being fully accurate.

What it says is that with care, with respect to the environment, with proper management and based on actual technology, we can double that net energy available and used and that with a rational program keyed to real possibilities we can redouble that amount, which would be a very respectable number, equaling about 5 percent of our total annual energy needs at present consumption rates.

The proposed budget of $20.5 million in terms of money is, I believe, quite adequate to do the job that should be done. This is true, provided that the money is invested in a sound program, stripped of extraneous matters, and concentrates on those areas where real results are most likely. In fact, $20.5 million is not much less than has actually been spent directly on biomass activities of all kinds by the DOE Biomass Division, despite the larger sums that have been allocated in recent years. Unfortunately, the sums allocated have not been invested as the budgets have specified, and large sums have gone to matters that have little or nothing to do with biomass. If you budget the money, allocate and authorize it, I am old-fashioned enough to believe that it ought to go where it is specified to go. Otherwise, you don't get what you pay for and good activities get robbed.

Therefore, I will emphasize the key points as I see them.

First is managing a baseline resource analysis—a short, determined effort to establishing a realistic knowledge of what biomass there is, where, and a rational evaluation of what parts of it can be used. I do not mean to repeat the multitude of studies that prove or disprove mainly the hopes and prejudices of some special group, but on a regional basis for the major resources—mainly wood—to find out what is where, in what quantities, and how much of it can actually be used without several ifs—if we had this, if we had that.

Second, we must concentrate on raw material production in terms of desired types, improvements in productivity—yield per acre, for example—genetic improvements, harvesting means, collection and transport, and preparation for use. Of all activities, concentration on improvement of raw materials costs will have the greatest influence on cost, use, and development of biomass.

In any process there are three elements to the cost of actually making the product: raw materials, labor, and process or burden. In all biomass conversion systems except one, raw materials represent from 75 percent to over 90 percent of the total cost. It is true that processing can be made more efficient and new ideas may pop up, but investing in process improvement to perfection will, in fact, haye only a minor influence on the final cost of the energy forms produced. Improving the raw materials picture by a few percent nationally would have a tremendous ultimate effect on costs.

Third, I would recommend that the above two key elements be managed on a regional basis from a national central focus. I think that all of the elements of the Nation involved must be used—other Federal departments, local authorities, schools and universities, and private endeavor. But I think that the efforts, insofar as possible, should be impelled and managed on a regional basis. The people in the regions know their own climate, geography, needs, potential, capabilities, more intimately and practically than any central administration. We have had a very useful example in the Pacific Northwest where the DOE regional office brought together everyone with an interest, other agencies to individuals, drew up an action program that fitted their needs, which could be modified to fit other areas, and then moved forward. This example should be repeated rather than ignored or squashed. It holds a high potential for paying off.

Four, nearly everyone, from governments to individuals, looks for an opportunity that may be unique to him or which fulfills a real need, alleviates problems and, if successful, will have a major effect on the Nation. The Government has such an opportunity to do what governments are supposed to do; that is, fulfill those needs that the people can't. And for once there is almost unanimous agreement by those who work in the energy field concerning a single program with a very good risk of being successful—the conversion system for cellulose to ethanol.

Despite claims to the contrary, there is no known system that is acceptable as a commercial risk. Two systems, each with variations and a hybrid of both, have been shown to be technically feasible up to large, bench-scale activities. Translating the processes to well-designed, operable commercial ventures will take money and time and the results, if successful, fulfill almost every criterion that can be imagined for biomass.

I am not preaching panacea. There isn't any. I do believe, and I am not alone, that a cellulose to ethanol process will provide large quantities of high grade fuel, derived from relatively low cost raw materials. Urban wastes, for example, act as an important assist to the control of urban and industrial wastes, provide new opportunities to many mid-sized firms with excess power heat and large, costly-to- manage waste piles of cellulose. It removes any food versus fuel problems and diminishes the net energy question and puts the high grade fuel where it is needed most.

The best estimate I know is that in 1980 dollars it would take about $60 to $80 million spread out about 6 to 8 years, with the costs earned back during the final years, some of the costs.

The time and money is needed to direct, put into operation, and improve the concept. I strongly hope about $6 million from the 1982 budget could be devoted to this to get it going and thus fulfill DOE's intent, along with Agriculture and other agencies. Agreement is almost universal on both sides of the aisle that it should be done. In fact, most optimists, based on the concept, speak as if it were a reality.

Speaking and wishing won't make it so. A properly managed program, with the right people, backed by the funds necessary, would make it so and could make it possible.

My written testimony provides some suggested division for the plan of $500,000. I have touched on the main ones here that will in themselves, and do, justify a tightly managed, directed, and useful program that could produce results.

Thank you for letting me speak.

Chairman Hatfield. Your 5 minutes are long past. Would you like to accelerate this?

Mr. Harris. I was just finished.

PROGRAM TAX

Chairman Hatfield. That was well timed. [Laughter.]

Let me ask you, you indicated in your testimony that you felt that $20 million for the Biomass Division would be adequate, provided that the money was spent as you described and provided the money didn't get diverted to other activities. How is this diversion taking place?

Mr. Harris. In the past, once the budgets have been submitted, broken out by what the people wanted to do, there has been taking a "tax" on those sums by superior authority which has been used for whatever reasons they have seen fit. Generally, in the past I believe it has ranged between 8 to 12 percent as a direct tax. In other cases, moneys that were allocated specifically for projects have been taken away from those projects and directed to other things that were not within the biomass budget.

Chairman HATFIELD. Were these appropriations being siphoned off into such programs while you were there, and what kinds of things were being funded at that time?

Mr. HARRIS. Yes, sir. I can illustrate as the best example a case where a project had been approved all the way up the line and the contract issued for something that was considered to be of great importance to the program, for $3 million. Prior to the time that the money was actually to be issued to the receiving organization, it was taken away for a computer. The project has never gone through. In fact, one of the subcontractors later informed me they had lost a considerable amount of money because they had gone ahead to prepare it.

REGION X WOOD-DERIVED FUEL PROGRAM

Chairman HATFIELD. I noted that you had also a recommendation toward regionalization of these programs. I am sure you are familiar with the region X wood-derived fuel program. Would you consider it a model for this type of regionalization which you advocate?

Mr. HARRIS. I do consider it as a model. As a matter of fact, I tried desperately, before I left the Department, to have that imitated or copied by other regions of the country. The activities of those people in the Pacific Northwest are so fundamentally reasonable and appropriate to what they were doing that it appeared to me to be a method whereby moneys really practically could be put to work on local problems.

Chairman HATFIELD. You imply that you feel the Division could dump about 100 of its research projects. Is this on the basis of the Division's capability to manage them or is it a cost-effective basis, or on what basis do you make that statement?

Mr. HARRIS. Both seasons are, in fact, there. A group of five or six people is totally incapable, no matter what their qualities are, to manage a hundred projects and give them the attention that they deserve and require, even minimally, from the standpoint of regulation.

Second, so many of those projects cannot in any way be shown to develop biomass. They are strictly good things to do for scientific purposes.

Chairman HATFIELD. Mr. Harris, you have been a very excellent witness. I would like to impose upon you further, if I could, in terms of submitting to you some written questions based on your testimony. If you could respond to those for the committee, it would be very helpful.

Mr. HARRIS. I would be glad to, Mr. Chairman.

Chairman HATFIELD. Thank you, Mr. Harris. Your detailed statement and the questions and answers will go in the record.

[The statement and questions and answers follow:]

STATEMENT OF SANFORD HARRIS, CONSULTING ENGINEER, WASHINGTON, D.C.

PERSONAL INTRODUCTION

My name is Sanford Harris. I am presently a consulting engineer here in Washington. Previous to this I served in the Government as Chief of the Biomass Branch, now a Division, at the U.S. Department of Energy, and as Chief of Production and Supply for the National Alcohol Fuels Commission. Prior to Government service I was 25 years in business and industry at the executive level. I was invited to testify today as an expert witness on the question of the future of the biomass program in a time of great budgetary restraint.

PREMISE

For the past five years the Congress, in collaboration with the Administration, has been trying to see to the development of a coherent and productive Biomass program centered mainly at the Department of Energy. Little concrete success has been achieved, due mainly to the frustrations of a program partially ignored by senior levels at the DOE and the fact that biomass was appended to a solar program which was devoted and dedicated to more impressive activities. At the Division level other frustrations have impeded and mitigated efforts to move forward. The list is long and not very useful to detail here. There are, however, three very important elements I would like to discuss:

1. There is a lack of definition of roles for the active participants in the program -- who is to do what and how?
2. There is a lack of definition of a specific mission -- what is a biomass program set up to do?
3. There is a pre-occupation with technologies and improvement of conversion efficiencies rather than a cohesive attempt to find the key elements which could make biomass a source of energy competitive in the marketplace.

This is not to say that the mission and the roles have not been considered. But the official statements about a mission for biomass are vague, and about the roles of participants we know only that the Biomass Division is said to be the lead element in the Federal effort. There are now on the order of ten agencies, offices, and bureaus in the Federal government working on some form of biomass activity, often alone, often without coordination, and often in ignorance of what others are doing.

DEFINITION OF ROLE

Any intelligent appraisal of a biomass program and its budget requires a clear definition of roles. By that I mean simply what type of activities must the biomass people engage in and who should be doing the work. I believe that within the Federal government there should exist only a single entity whose sole responsibility it is to direct the investment -- as opposed to expenditure -- of federal funds for the purpose of developing biomass as a source of energy. This entity should seek out and use those individuals and organizations best qualified to achieve its mission. There should be strict procedures to evaluate program goals , operating projects and the performance of contractors, on some periodic basis, in order to determine what activities should be completed and by whom, and which activities should be discontinued because they lead to a dead end.

The entity should set out to do only what it is capable of doing. Thus, it must know precisely what its mission is: Should it engage in basic science, basic technology, advanced technology, market research, commercialization, etc. Once a plan has been adopted by the Administration and funded by Congress to develop biomass as a source of energy, it should be executed over a period of time without deviations and without the siphoning of funds into extraneous and distractive activities.

If this federal entity in charge of biomass is to be the Biomass Division of the DOE, its role ought to be defined as establishing the fields where an evaluated risk describes potential, where the chances of success are real and not theoretical, and where all means available will be employed, managed, and made to accomplish a defined plan. The means include the federal establishment, the academic sector, and private enterprise. The plan should not include, under any circumstance, such activities as market research and integration and commercialization. Funds should be used only where they promise a return.

DEFINITION OF MISSION

Exhibit 1 and appended footnotes summarize the sources of biomass, their gross energy potential, and the net energy available for useful purposes. This table is the consensus of many experts using the best available information. It is not presented as the last word. The numbers are probably within 10 to 15 percent of reality in each case. The table indicates where to expect the best results for each federal dollar invested and what potentials there are.

Biomass is not an infinitely renewable resource. Sustained yields can only be had by replenishing the nutrients of the soil. The only truly renewable component is the sunshine necessary to plant growth.

Biomass is significantly different from other solar sources of energy in that, unlike the others which are classed by discrete scientific disciplines such as wind power conversion, photovoltaic conversion, etc., biomass is converted and made available for conversion by several distinct technologies, a significant aspect of its management.

Nearly all of the biomass conversion technologies are long established, well known, and in fact have been used in one or another form for decades or centuries. Certainly most of them can be improved, are being improved, and will continue to be improved by the people who make or use the systems. New ideas which can increase a conversion efficiency are sometimes profound, but it is characteristic of the biomass technologies that such improvements are marginal and expressed in very small percentages. There is a single characteristic which is the key to the improvement of biomass use. With only one or two exceptions, gas from land-fill for example, all biomass technologies have a common problem: the cost of raw material. In all these technologies raw materials costs range from about 75% to over 90% of the actual cost of producing the product. It is essential to understand this fact.

This should be a clear guide to the area where biomass activities can have direct effect on the supply of less costly energy supplies. Simply said but difficult to achieve is that lowering the cost of raw materials is where the real quantitative results on biomass energy costs can be had. An extreme example is in the production of ethanol where the cost of the raw materials is now about 90% of the cost of making the alcohol. Investing in improved processing can have only a very marginal, a miniscule, effect on the cost of making the alcohol because processing costs are on the order of about 5%, which means that, if a way were found to eliminate them entirely, including the labor, the final cost of the goods would be reduced only by a very few cents per gallon.

To a lesser degree the quantities of biomass used in any plant are limited by economic haulage distance; e.g., a wood-using plant, under present conditions, can rarely exceed about 1000 tons/day dry wood equivalent economically.

Millions of dollars have been spent on surveys, estimates, and conjecture concerning what materials are available and the extent to which this resource base can supply biomass for conversion. They, mostly, are analyses of statistics of production, growth, and potential based on criteria used to substantiate or deny a conjecture. Some of them have been quite useful in a general way but most share a quality which can only be described as a form of wishful thinking. Too often we have seen figures which purport to show that in the U.S. "X" tons of wood grow throughout the nation and therefore "Y" tons are available which, multiplied by the heat content, the BTUs, indicates that this amount of energy lies out there to be converted. Very little objective and comprehensive work has been done to qualify the real quantities available for actual use. Simply put, a million tons of wood lying in a rugged mountainous area far from any energy users does not now constitute an available resource.

These two general factors seem to indicate or drive the nature of a biomass program which the federal government can support and which can have real effects in the short term and for a long period in the future. Twenty million dollars annually at this time would seem to be a comfortable and useful figure.

PROGRAM ACTIVITIES

Such a directed program would do the following things:

1. A series of purpose-oriented base-line resource examinations to determine the exact, insofar as possible, nature of the biomass resource that is really available for use; each study to be dedicated to a single resource and, in the case of wood, managed by region. Such studies, separately made to determine grain availability, wood, aquatic biomass, waste products, etc., will be profitable investments establishing the baselines. The criteria should include totals, totals truly available based on location, collection methods (existing and potential), usefulness and competitive uses with emphasis on the real evaluation of useable quantities and where they are.
2. Raw materials cost improvements. This should be dedicated research of practical methods to improve productivity or yield per unit -- e.g., acre or other appropriate producing unit -- and should include production practices and equipment needs. Full attention must be paid to the entire systems considered and be restrained by practical considerations. It's no good to propose some ultimate system when components of production are not possible or are ruinous in cost, such as contemplating a reversal of agricultural practice where billions in equipment are already present which would have to be scrapped or modified at horrendous cost, or where water would be needed but there is no water except, again, at prohibitive cost and effort. Efforts should be made to invest logical sums in genetic improvement and manipulation. An

example of this which is used only as an illustration but which is not beyond the realm of possibility would be turning corn into a perennial plant, the effects of which would be a green revolution with bells on.

Included in the raw materials work should be collection and harvesting developments. A large effort with huge potential would be improvement in tree harvesting and collection equipment coupled with preparation for conversion.

3. Long term, more basic work should be introduced or modified from present efforts on some longer term developments. These efforts require intensive preparation before action in examining the potentials, evaluating their scientific soundness and, even at the earliest stages, translating the scientific efforts into probable practical application by engineering means that have the ring of practical sense can be had. Their budgeting should be extended at least five years relating to the people and laboratory resources that are available and would have to be made available. Five-year budgeting is not a precise science, but it does have the merit of providing orders of magnitude of needs and disciplining the people managing and operating. Such work should be reviewed and evaluated not more frequently nor less than once a year, so that control of the activities is maintained but not pressure on the workers. The popular and often useless device of the "milestone" point in planning should not be applied here, as it is now, because such rigid planning does not, or does rarely, lend itself to scientific research. This does not mean that no controls are to be imposed; it means that such controls should be applied with reason. Suggested subjects are fundamentals in biomass burning characteristics, the kinetics of combustion, photosynthesis work, photochemistry, aquatic biomass development for energy, pollution control, and resource recovery such as the recovery of heavy metals from plant effluent. The latter, non-energy research topics are suggested because they are related activities.
4. Some effort should be made to apply research to modernizing the conversion of biomass to petrochemical type materials. Biomass will probably never be able to compete with petrochemicals until such time as petroleum and natural gas are in very short supply. But it is very probable that, in certain regionally operated plants, biomass chemicals will not only

compete but be valuable supplements. For example, should economic means be found to use certain agricultural wastes without depriving farms of needed nutrients from these wastes, small area suppliers of urea type fertilizers could well support local agriculture. This means processing and plant designs modified from existing ones. A simple examination of the facts will support or eliminate this concept; it hasn't been done.

5. A small limited effort should be made to assist industry in improving the energy process needs and designs of conversion plants. Recent events have shown that once again, faced with economic pressures, industry itself is moving in this general line prompted, not by government or bureaucratic insistence but by the facts of life, to conserve through better design because it pays to do so.

This program should be divided among the agencies and organizations with background, history, and expert ability to accomplish it. No new establishments are needed. The Biomass Division should have top management responsibility to see it through, but I, personally, do not share the fear that giving operational control of forestry matters to the Forest Service, for example, will see vitiation or diversion of funds to other uses so long as both understand what is wanted and how to get there.

Because this is a very large country and because its needs are very different from region to region and because energy needs vary by geography, the activities should be based on a regional approach as far as possible. The regional people know far better what their needs are and who can work on them than does a central administration. For this reason any Biomass program should, I believe, rely on association with the regions to the extent of providing them with funds, always within the general framework of the planned operations, to get the job done. What the Pacific Northwest needs, wants and can accomplish may bear little or only family relationship with the needs of the Northeast or the South. But the overall direction of events can be the same, tailored to their needs and with a general information exchange at all times.

Efforts should be concentrated on keeping abreast with foreign activities. Countries such as Canada, Sweden, Germany, and France all have similar if not identical needs and activities. There is some liaison but not enough regular contact. These lines of communication should be improved and any lingering "not invented here" psychology should be eliminated from U.S. thinking.

The ideas above leave no room for the marginal or interesting activities that have characterized our past activities. Anaerobic digestion of animal wastes or crop wastes, liquifaction of wood, grain alcohol development, thermochemical innovation and the similar activities that have been most interesting, but of little practical effect, must now take a back seat in federal activities. These things will be catered to on a practical level by industry as its own needs are perceived and understood.

There is, however, one area that I have set aside for special emphasis. Nearly everyone agrees it should have priority but it is on dead center because there is no federal or other mechanism to get it going.

In the search for alternate fuels, the need for which does not diminish due to temporary gluts and new discoveries, ethanol has been found to provide a partial but potentially larger share. As a quick fix, but to a very limited degree, ethanol from grains can and has provided a small and useful addition. If there were to be a source of ethanol which did not involve the food/feed-vs-fuel and the net energy controversies, it could have a remarkable effect on the satisfaction of fuel requirements for the future. Such a solution has been proposed and demonstrated as being practical but there has been no means found to erect the necessary demonstration and perfection unit needed to prove out the process such that industry could comfortably invest in the necessary plant. The source is cellulose. Conversion of cellulose to ethanol has been shown to be feasible technologically but not commercially. The odds on its being successful weigh in its favor, but it cannot be shown to be so, nor the technology developed, until a plant has been built and run for a couple of years. Industry can't do it because the cost is too high for industry to do so on its own with no means of providing for normal investment protection. Such an effort would require about $70 to $80 million (expressed in 1982 dollars) spread over six to eight years from the decision to go. It is a practical demonstration and its successful solution would help to solve many current problems. Aside from providing ethanol it would help to solve pollution problems and waste disposal problems, put wasted resources to work, and assist many companies to improve profit positions using their existing resources. I am not one to pretend that this is a panacea; they don't exist. A cellulose-to-ethanol system that works will not solve the problems of disposing of urban and industrial wastes, but it would certainly alleviate this growing problem by using, for profit, tremendous quantities of such wastes and diminishing the amounts left for disposal. It would use materials for producing fuels in those areas that need them most. Contemplate for a moment the problem, as it exists in the Meadowlands area of New Jersey, where 50 thousand tons per week of urban waste is being piled up and what a real effect a new industry to use about a third of that amount to produce a clean-burning, high-value, liquid-transport fuel could have.

FUNDING REQUIREMENTS

The FY 1982 budget request of the new Administration for biomass is approximately $20 million. It may surprise you to learn that despite the larger apparent size of the biomass budget in recent years, the sum of $20 million per year is only slightly less than what the Biomass Division has actually been able to devote to its activities. The remainder has been siphoned off for so-called "cross cutting" activities which may or may not have had much to do with biomass. At the very least, these activities were not presented to Congress in the official budget requests.

Given a defined role as well as a defined plan, and a clear understanding that funds are to be invested only in the activities defined by that plan, it is my contention that an annual R&D budget of about $20 million (constant 1982 dollars) over the next five to seven years is sufficient to develop biomass as a source of energy within its practical limits.

The program outlined above might have the following first year budgetary form:

1.	Resource base line establishment	$2.5 million
2.	Raw material development	8 million
3.	Long term scientific research	1.5 million
4.	Chemicals from biomass	1 million
5.	Engineering, information, etc.	.5 million
6.	Cellulose conversion	6 million
7.	Wind-down operations on excess programs	1 million

This budget is general and, of course, it can be modified. Inherent is the need to see that the funds budgeted are expended for the designated items and not skimmed by higher authority for non-budget-designated uses. Such funding should properly be itemized in the budget so that the Congress and others know what money is being used for what. Successive years would not require more than inflation-augmented amounts.

To the all-important question of what this or any similar budget will return in terms of knowledge or results, it is not possible to supply any form of precise response. The cellulose conversion effort will provide the answer to the commercial design of a conversion plant, if followed to the end, with the results of establishment of a new industry, partial control of the waste management problem, and a convenient and stable source of fuel. The base-line resource work will provide the ground work on which continued and worthwhile efforts to use biomass for energy will be founded; the raw materials work will indubitably provide an increase in efficiency of biomass energy production through less costly raw materials and more advantageous use of resources. A two percent improvement here would, over a five year period, be worth millions to agriculture and industry in the U.S.

Each of the others will only be measurable in terms of developments and processes that will be useable and useful. Eliminating some operations at a wind-down cost of about a million dollars, spread perhaps over two years, will net savings and cease unremunerative activities.

XHIBIT 1. SOURCES OF BIOMASS AVAILABL OR CONVERSION AND THEIR ENERGY EQUIVALI S
(Mt = millions of metric tons, dry; Q = Quads, or 10^{15} BTU)

Biomass Sources	Total Biomass (Mt)	Available for Energy Conversion (Mt)	Potential Gross Energy (Q)	Potential Net Energy (Q)	Form of Energy	Net Energy Currently Utilized (Q)
Manure	210	100	1.70[a]	0.09[b]	Gas	0.001[aa]
In-field Crop Residues	473	80	1.36[c]	0.09[d]	Ethanol	---
Bagasse (50% moisture)	4	4	0.07[e]	0.04[f]	Heat	0.037[bb]
Food Processing Wastes (70-90% moisture)	15.4	15.4	0.26[g]	0.01[h]	Gas	---
Industrial Wastes	100	9.4	0.11[i]	0.07[j]	Heat	0.051[cc]
Municipal Solid Waste	136	66	0.59[k]	0.15[l]	Electrical	---
Municipal Sewage	13	10	0.17[m]	0.01	Gas	0[dd]
Aquatic Plants	19	3.3	0.06[o]	0.002[p]	Gas	---
Wood-fuel Production	70	70	1.19[q]	0.62[r]	Heat	0.20[ee]
Forest Residues	180	48	0.82[s]	0.09[t]	Ethanol	---
Mill Residues	77	77	1.31[u]	0.72[v]	Heat	0.72[ff]
Grains, Starches and Sugars [a]	430	22	0.37[y]	0.15[z]	Ethanol	0.008[gg]
Forages for Fuel	153	153	2.60[w]	0.20[x]	Ethanol	---
TOTAL	1,880.4	658.1	10.61	2.242		1.017

FOOTNOTES TO EXHIBIT 1.

a/ 100 Mt x 8500 BTU/lb dry manure = 1.7×10^{15} BTU gross.

b/ 50,000 BTU/t was included for collection and transport. Thus, the net biomass energy converted was 5.0% of the gross energy.

c/ 80 Mt x 8500 BTU/lb dry residues in the field = 1.36×10^{15} BTU gross.

d/ For collection and transport the energy input was calculated to be 340,000 BTU/t and for nutrient replacement the cost was calculated to be 575,000 BTU/t. Thus the net biomass energy converted was 6.8% of the gross energy.

e/ 4 Mt x 8500 BTU/lb dry processing wastes = 0.07×10^{15} BTU gross.

f/ Sugar bagasse and similar wastes that could be burned were assumed to contain 50% moisture (dry weight basis) and thus contains 6000 BTU/lb. Combustion efficiency in the boilers was calculated to be 55%, thus the net energy was calculated to be 1,980 BTU/lb. No collection and transport energy costs were included because it was assumed that the wastes were processed at the food processing plant.

g/ 15.4 Mt x 8500 BUT/lb dry food processing wastes = 0.26×10^{15} BTU gross.

h/ No energy inputs for collection and transport were included because it was assumed that the wastes were processed at the food processing plant.

i/ 9.4 Mt x 6000 BTU/lb of industrial waste = 0.11×10^{15} BTU gross.

j/ Industrial wastes were assumed to be burned in boilers at the industrial facilities at 55% efficiency. Thus, the net heat energy is calculated to be 60.5×10^{12} BTU.

k/ 66 Mt x 4500 BTU/lb dry wastes = 0.59×10^{15} BTU gross.

l/ For net energy as electrical energy, it was assumed that 4 BTU heat energy input was required to produce 1 BTU of electrical energy. No transport costs were included; these were assumed to be a part of normal handling costs.

m/ 10 Mt x 8500 BTU/lb dry sewage = 0.17×10^{15} BTU gross.

o/ 3.3 Mt x 8500 BTU/lb dry aquatic plants = 0.06×10^{15} BTU gross.

p/ If the aquatic plant biomass were converted into biogas, the gas energy would be 3.0×10^{12} BTU. About 1×10^{12} BTU are assumed to be used for collection and transport. Thus the net is 2.0×10^{12} BTU.

q/ 70 Mt x 8500 BTU/lb dry wood = 1.19×10^{15} BTU gross.

r/ Energy inputs for the harvesting, collection, and transport of wood was calculated to be 442,000 BTU/t. Nutrient replacement for the biomass removed was calculated to be 943,000 BTU/t. The fuel wood with 50% moisture (dry weight) is assumed to have 12×10^{6} BTU/t. Conversion into heat energy is calculated to be 55% efficient.

s/ 48 Mt x 8500 BTU/lb = 0.82×10^{15} BTU gross ethanol.

t/ Assuming 442,000 BTU/t of forest wastes for harvesting, collection and transport and 943,000 BTU/t for nutrient replacement, then the net energy as heat per ton is 15.6×10^{6} BTU. Conversion into ethanol would result in a net return of 1.9×10^{6} BTU per ton of wood residues as ethanol.

u/ 77 Mt x 8500 BTU/lb dry wastes = 1.3×10^{15} BTU gross.

v/ The forest wastes are assumed to contain 50% moisture (dry weight), thus the heat energy content is 6000 BTU/lb. Conversion into heat energy is calculated to be 55% efficient.

w/ 153 Mt x 8500 BTU/lb = 2.6×10^{15} BTU gross.

x/ For every 3.0×10^{6} BTU of ethanol produced per ton of forage, inputs for producing the forage are calculated to 1.7×10^{6} BTU per ton. Thus, maximum net yield = 0.20 Q.

FOOTNOTES TO EXHIBIT 1. (continued)

y/ 22 Mt x 8500 BTU/lb = 0.37×10^{15} BTU gross.

z/ Since for every 2 BTU of ethanol produced, 1 BTU of high grade fuel input is required, the net yield is calculated to be 150×10^{12} BTU for the 153 Mt of grains converted.

aa/ Estimated.

bb/ All combustible biomass wastes from food processing plants are assumed to be utilized.

cc/ Estimated.

dd/ About 19.2×10^{12} BTU of biogas is utilized to heat biogas generators, but this is not "net energy".

ee/ Presently about 25 Mt of fuel wood is being used for heating. Assuming this wood contains 50% moisture (dry weight) or 6000 BTU/lb and the conversion efficiency is 60%, then the net energy currently produced is 0.90 Q.

ff/ All of these wastes are assumed to be used to date for heat energy.

gg/ It is estimated that 100 million gal of ethanol are currently being produced. Since a large part of the alcohol being produced utilizes oil or gas for distillation, the net energy actually produced is really about zero. However, assuming that these plants convert to coal, then optimistically the net energy might be 7.6×10^{12} BTU.

ANSWERS TO QUESTIONS SUBMITTED BY CHAIRMAN HATFIELD

Written answers to questions posed by Senator Hatfield respecting the testimony of S.M.Harris before the Subcommittee on Energy and Water Development,Senate Committee on Appropriations.

Question: You emphasize that impro vement in raw material delivery is where the important gains can be made,generally speaking,in the efficiency of biomass energy production,since the raw material,and not the conversion process,is the big cost factor i in biomass energy. What does this suggest ab out a wood energy program in the Peacific Northwest.

Answer: It suggests ,as I tried to indicate in my testimony,that such a program,and similar ones in other regions,go to the root of the problem on a very practical and remunerative basis.Wood is,and will probably remain,the major source of biomass energy either within the forest products industry or more broadly.The program elaborated by the people in the Pacific Northwest attacks directly the compnents of knowledge,managmeent,handling,production and the use of wood - it is regional in scope,it combines all of the interests,and it works on the very basic problem of raw materials co sts.

Question: Please describe in a little more detail the cellulose conversion process you envision. I noted your emphasis on municipal solid waste— what other raw materials are your thinking of in terms of this particular conversion technology ?

Answer: There are two major approches to converting cellulose to ethanol,each of which has some minor variations: acid hydrolysis of cellulose to sugar for fermentation and enzyme hydrolysis.The two can be considered as representing two types or classes of conversion the former being a chemical process the latter a bio-chemical process.Each ,in its way,manages to break down the very complex cellulose starch to sugars.The fermentaion of the sugar solutions is accomplsihed by classical methods which require little or no changes.Eac h has certain advanatages and disadvanatages compared to the other.Conversion efficiency for the enzyme process is slightly higher than for the acid system.However it requires somewhat more original capital for plant construciton due to the enzyme production unit,the appropriate controls and management.The acid system is,however,perhaps more difficult for practical solution because acid is corrosive and therefore the reetion vessels need corrosion resistant materials.Acid system preparation of the cellulose may be simpler because the enzyme system requires finer particles of cellulose for the process.On the other hand the acid system does not require cellulose in a form that is purer than the enzyme system requires.Therefore,the enzyme system might be consid ered as better for using the cellulose fraction of urban wastes as generally these are in almost pure cellulose forms (paper,carton and the like).Neither at this stage can be considered commerically practical nor will they until a full scale test plant has been erected and used for a period sufficiently long to perfect it and run it on a continuous basis to prove the concept and design.Other raw materials can be wood from plant wastes,from forest residues and wastes and the like.WHat is suggested is the design and building of a plant that will test both system,i.e. parallel front ends to test both systems and perfect them in practice.There should be no problem inthe actual fermentation process,it is classical.Such a plant might cost about $70 to $80 million to build and operate over a period from inception of the project to completion which is estimated at about 6 to 8 years at"normal" conditions.Indeed,if a complete plant is erected,the latter years of the test period migh even be almost self-supporting from sale of the ethanol produced.

Question : Your mention of chemicals from biomass appears to imply that you believe that in the long run these conversions will be more valuable for their petrochemical applications rather than fuel applications. Is that a fair statement ? Is most of this stuff going to be a little too expensive to burn ?

Answer: I had not intended to leave the impression given.My concept is that in certain local and special conditions it is possible that the use of certain biomass materials their application to produce some useful chemicals might,economically, have an advanatage over their use for liquid fuels.Where,for example,some agricultural wastes might better be devoted to producing chemcials for local use, fertilizers on farms as an example,this would be more useful than as fuel for cars. Whether,in general,a product of biomass gets too valuable to burn market forces will be the determinant so long as it is put to its highest and most practical use economically and technically.

PAPILLION CREEK AND TRIBUTARY LAKES, NEBRASKA

STATEMENT OF MEL HOIER, PAPILLION VALLEY PRESERVATION ASSOCIATION

ACCOMPANIED BY GEORGE LORITZA

Chairman HATFIELD. I would like to invite Mr. Mel Hoier from the Papillion Valley Preservation Association.

Mr. HOIER. Good morning.

Chairman HATFIELD. Mr. Hoier, we have your full statement, which will be placed in the record.

If you would like to introduce your associate, we would be very happy to have you highlight your statement.

Mr. HOIER. Yes; I have a written statement. I will cut it very brief, sir.

Mr. Chairman, and the rest of the committee, I would like to introduce myself. I am Mel Hoier from the Papillion Valley Preservation Association. I would like to introduce a fellow board member from the same association, Mr. George Loritza. He will make a couple comments after I am through.

We submitted our copies of our testimony for the record.

A year ago we were here asking for funding for a seven-point resolution. I should say not necessarily funding; it went along. It was passed by the three county boards in our area on the Papillion, the Natural Resources District, and the Papillion Valley Flood Protection Association.

We have at this time accomplished a lot of the seven points. As to the first six, I have just been going through them again in my briefcase and it looks like we accomplished most, or at least are in the process of accomplishing, the first six of the seven points. The seventh point, however, has been ignored—the deauthorization of the balance of the project. This is very important to our association as we have been opposed to the dams and have proven them to be unsatisfactory.

We would like at this time to accept Congressman Daub's resolution. I imagine you are familiar with the fact that he has a committee of the Papia Watershed Coordinating Committee that he has, as he worded it, grouped altogether, separate people with interests on the Papillion, including the city of Omaha, and then the small cities around it, our association, and the other associations on the lower end of the Papillion.

We want it in the record that we accept the Congressman's resolution, with our amendment attached thereto. Our amendment, and I can read it to you, says that:

> We approve the basic resolution, only on the condition that work on dams 18 and 20 be held in abeyance unless the PWCC board unanimously approves an alternative plan on the entire project.

As soon as the Corps studies this plan, we will have something to vote on. I am talking about the PWCC board.

They need funding, of course, for this study. They have a study now. They think it is 16 years old. I am sure it is 14 to 16 years old and there are new ways of measuring hydrology. So, we think that this would be a good deal. If the channelization needs restudying, we feel that so should 18 and 20 be restudied so that we get the new, up-to-date benefits.

The Papillion Natural Resources District a week ago, or back in early March, voted not to accept sponsorship of one of the dams, and they also voted 11 to 9 just prior to our coming back here a couple days ago not to accept the Congressman's resolution with another amendment that was drawn up. I can read you that one that was added to it. This amendment reads as follows:

> If the PWCC doesn't agree unanimously with the Corps' alternative by September 30, 1983, the PWCC will pursue deauthorization of the entire project, except dams 18 and 20.

I guess primarily what we are here today for is to ask you to accept or go along with the Congressman's resolution to ask the Corps for a study of channelization and to ask you not to fund any further funds on dams 18 and 20. I think that is the end of my presentation.

Mr. Loritza. After he is through, I would be glad to answer any questions you might have.

Mr. LORITZA. I am George Loritza, Mr. Chairman. I think that Mel pretty well covered this. We have always been opposed to large dams. I think he said it has been proven unsatisfactory, which the engineering did.

Last June, in the upper area, we had rains on June 6 in excess of 8 inches, which is considered a 100-year flood. The flows passed down through the channel with no problems, which just backs up our thoughts which the engineers have confirmed over the years. So, I think this proves the point that the corrective measures for flood control have to be done on the lower end where the problem really exists.

Chairman HATFIELD. Do you gentlemen own property in the area that is affected by this project?

Mr. HOIER. Yes. We are both farmers in the Washington County area. We do own land on Papillion Creek.

Chairman HATFIELD. So it would probably be an impact on your lands if these projects were funded?

Mr. HOIER. The two projects, 18 and 20, one is in lower Douglas County and one is in Sarpy County. It wouldn't have any impact on our farms.

However, dam site 20, the land has been bought for that, a few years ago, before a court injunction on dam site 10 in the northern end of Douglas County held up the entire project. Dam site 20 today, with a 3¼-percent interest rate, has a 60–40 percent cost-benefit ratio—60 percent for recreation, 40 percent for value as far as flood protection. We also feel that this isn't adequate for the costs we are talking about. The Corps figures say $15 million after the land has already been purchased. Dam site 11—that has been done for a number of years—is about the same capacity, give or take a little. I am not real positive of this. But I know the figures asked for were $4 million for completion of 11, and the final figure we got was $22 million.

Chairman HATFIELD. Thank you very much, gentlemen.

[The statements follow:]

Statement of Mel Hoier, Chairman, Papillion Valley Preservation Association

In good faith the PVPA supported the 7 point resolution in 1980. Congress did not address itself to the deauthorization portion and we find ourselves wondering why a year has gone by and nothing has been done.

Several cities are willing to request funding for a Corps of Engineer review of the currently authorized project on the condition that acquisition or construction on Sites 18 and 20 are held in abeyance until acceptable alternative plans have been approved by the PWCC Board, by unanimous vote, on the entire project.

We believe it is necessary to review the authorized 16 year old data and update it before sites 18 and 20 are funded for construction or acquisition is undertaken.

The Papio Natural Resources District voted in February to defer any further action for support or sponsorship of the Papillion Creek and Tributaries Project until:

1. Specific deauthorization of dams 1 thru 10, 12 thru 15 and 3A
2. Reauthorization of Sites 18 and 20.

They further, in March voted not to send a representative to Washington to testify at the appropriation hearings. At a special meeting again in March they reafirmed their two previous motions.

And Wednesday morning the 25th of March, at a 11 to 9 vote, they defeated a proposed amendment to allow 18 and 20 to proceed.

Please enter this and the materials submitted into the official record.

PROPOSED RESOLUTION OF THE PWCC

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Cheif of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measurers, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

We approve the basic resolution only on condition that work on Dams 18 and 20 be held in abeyance until the PWCC Board unanimously approves an alternative plan on the entire project.

A seven point agreement for resolution of the Papillion Valley flood problem has been agreed to by the Papillion Valley Preservation Association and the Papillion Valley Flood Protection Association, the County Boards of Douglas, Washington and Sarpy and the Papio NRD.

It appears necessary in order to accomplish said seven point agreement, that the Corps of Engineers be asked to recommend a comprehensive plan for flood prevention as an alternative to the construction of the dams authorized by the Flood Control Act of 1968, Public law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587.

The proposed resolution of the Papio Watershed Coordinating Committee, copy of which is attached hereto, with PVPA amendment is approved provided any action on acquisition or construction of Dams 18 and 20 be held in abeyance until an acceptable alternative plan of flood damage prevention is recommended by the Corps of Engineers, and Congressional deauthorization is accomplished of Dams 1 through 10, 12 through 15, authorized by the Flood Control Act of 1968, Public law 90-483, and also the deauthorization of Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587.

STATEMENT OF GEORGE PEARSON, MAYOR, KENNARD, NEBR.

WHEREAS THE VILLAGE OF KENNARD WAS NOT INVITED TO PARTICIPATE IN THE MEETINGS OF THE PAPIO WATERSHED COORDINATING COMMITTEE, BUT FEEL WE HAVE A GREAT INTEREST IN THE OUTCOME, WE RECOMMEND THAT THE FOLLOWING RESOLUTION BE ACCEPTED:

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other non-structural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

We approve the basic resolution only on condition that work on Dams 18 and 20 be held in abeyance until the PWCC Board unanimously approves an alternative plan on the entire project.

Resolution of Washington County (Nebr.) Board of Supervisors

Resolved by the Washington County Board of Supervisors that they approve the passage of the following proposed resolution by the Papio Watershed Coordinating Committee; Provided that all work on Dams 18 and 20 be held in abeyance until the Papio Watershed Coordinating Committee unanimously approves an alternative plan:

> BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE, that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document numbered 475, Eighty-seventh Congress, 2d Session, House Document numbered 349, 90th Congress, 2d Session, and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other water and structural measures, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.
>
> BE IT FURTHER RESOLVED that we approve the basic resolution only on Condition that work on Dams 18 and 20 be held in abeyance until the Papio Watershed Coordinating Committee Board unanimously approves an alternative plan on the entire project.

RESOLUTION OF ELKHORN, NEBR.

The City Council of the City of Elkhorn, Nebraska has approved the following:

WHEREAS the City of Elkhorn is directly involved economically and environmentally with the Papillion Creek & Tributaries Flood Control Project, and;

WHEREAS the City of Elkhorn has consistently voted in opposition to the Corps of Engineers Papillion Creek & Tributaries proposal for flood control by construction of twenty-one dams, and;

WHEREAS the City of Elkhorn has not been included in the meetings sponsored by Congressman Hal Daub, which has resulted in the formation of the PAPILLION WATERSHED COORDINATING COMMITTEE and;

WHEREAS the City of Elkhorn would support an alternative plan for flood control for Omaha and the lower reaches of the Papio System which does not include the large dam concept;

BE IT RESOLVED that the City of Elkhorn does approve the proposed resolution by the Papio Watershed Coordinating Committee only if work on Dam #18 and Dam #20 be held in abeyance until the PWCC Board unanimously approves an alternative plan on the entire project. (Resolution attached.)

RESOLUTION OF WASHINGTON, NEBR.

RESOLVED by the Village of Washington, Nebraska

WHEREAS, a seven point agreement for resolution of the Papillion Valley flood problem has been agreed to by the Papillion Valley Preservation Association and the Papillion Valley Flood Protection Association, the County Boards of Douglas, Washington and Sarpy and the Papio NRD; and

WHEREAS, it appears necessary in order to accomplish said seven point agreement, that the Corps of Engineers be asked to recommend a comprehensive plan for flood prevention as an alternative to the construction of the dams authorized by the Flood Control Act of 1968, Public law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587,

The proposed resolution of the Papio Watershed Coordinating Committee, copy of which is attached hereto, is approved provided any action on acquisition or construction of Dams 18 and 20 be held in abeyance until an acceptable alternative plan of flood damage prevention is recommended by the Corps of Engineers, and Congressional deauthorization is accomplished of Dams 1 through 10, 12 through 15, authorized by the Flood Control Act of 1968, Public law 90-483, and also the deauthorization of Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public law 94-587.

RESOLUTION OF BLAIR, NEBR.

BE IT RESOLVED by the Mayor and City Council of the City of Blair that they approve the passage of the following proposed resolution by the Papio Watershed Coordinating Committee; Provided that all work on Dams 18 and 20 be held in abeyance until the Papio Watershed Coordinating Committee unanimously approves an alternative plan:

> BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE, that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document numbered 475, Eighty-seventh Congress, 2d Session, and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes diversions, and bridge modifications, flood plain and watershed management and other nonstructural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.
>
> BE IT FURTHER RESOLVED that we approve the basic resolution only on Condition that work on Dams 18 and 20 be held in abeyance until the Papio Watershed Coordinating Committee Board unanimously approves an alternative plan on the entire project.

COUNCILMEMBER Reyzlik MOVED THAT THE RESOLUTION BE ADOPTED AS READ, WHICH SAID MOTION WAS SECONDED BY COUNCILMEMBER Kuhr UPON ROLL CALL, COUNCILMEMBERS Reyzlik, Kuhr, Drbal, Long, and Jenny VOTED "AYE" AND COUNCILMEMBERS NONE VOTING "NAY", THE MAYOR DECLARED THE FOREGOING RESOLUTION PASSED AND ADOPTED THIS 27th DAY OF March, 1981.

CITY OF BLAIR, NEBRASKA

By M. Stanley Jensen
M. STANLEY JENSEN, MAYOR

STATEMENT OF DONALD BROWN, MAYOR, ARLINGTON, NEBR.

WHEREAS THE VILLAGE OF ARLINGTON WAS NOT INCLUDED IN THE PAPIO WATERSHED COORDINATING COMMITTEE MEETINGS AND WHEREAS WE WILL BE AFFECTED BY LOSE OF TAX DOLLARS, WE WISH TO FAVOR THE FOLLOWING RESOLUTION AS AMENDED:

BE IT RESOLVED BY THE PAPIO WATERSHED COORDINATING COMMITTEE that the Committee on Public Works and Transportation of the House of Representatives, and the Committee on Environment and Public Works of the United States Senate, be requested to ask the Board of Engineers for Rivers and Harbors to review the reports of the Chief of Engineers on Papillion Creek and Tributaries, Nebraska, published as House Document Numbered 475, 87th Congress, 2nd Session, House Document Numbered 349, 90th Congress, 2nd Session and other pertinent reports, to determine whether any alteration of the recommendations contained therein is advisable at this time with a particular view to developing a comprehensive plan for flood damage prevention and other water and related resource purposes to include approved channelization and other structural measures, including levees, dikes, diversions and bridge modifications, flood plain and watershed management and other non-structural measures, and combinations thereof, as an acceptable alternative to Dams 1 through 10, 12 through 15, 19 and 21, authorized by the Flood Control Act of 1968, Public Law 90-483, and Dam 3A, conditionally authorized by the Water Resources Development Act of 1976, Public Law 94-587.

We approve the basic resolution only on condition that work on Dams 18 and 20 be held in abeyance until the PWCC Board unanimously approves an alternative plan on the entire project.

O'NEILL UNIT, NEBRASKA—OPPOSITION

STATEMENT OF ED JAKSHA, PRESIDENT, NEBRASKA TAX LIMIT COALITION

ACCOMPANIED BY:

TY HARRISON, THE NATURE CONSERVANCY
PHIL SCHREIER, VERDIGRE, NEBR.
TED HOFFMAN, NEBRASKA CHAPTER, SIERRA CLUB
LLOYD FISCHER

Chairman **HATFIELD.** I would invite Mr. Ed Jaksha, president of the Nebraska Tax Limit Coalition, Mr. Ty Harrison, The Nature Conservancy, Mr. Ted Hoffman, Nebraska Chapter, Sierra Club, and Mr. Lloyd Fischer.

Mr. **JAKSHA.** Mr. Chairman, with your permission, I would like to have Mr. Schreier share my time.

I am Ed Jaksha from Omaha. I am president of the Nebraska Tax Limit Coalition. This is a citizens organization which addresses its action toward matters of government spending and taxes. Our present mailing list totals over 20,000 households in Nebraska.

I am reporting we are just plain sick and tired of never-ending tax increases by all elements of government. As taxpayers, we support programs, services, and persons in government. As citizens, we are simply asking you to take less and to spend our money more wisely.

With your copy of this testimony I have attached a Susan B. Anthony dollar. Our local post office advertises the Susan B as the dollar of the future. If this is the case, I submit that we may really all be in trouble. Most people have refused to honor Susan B in their ordinary course of business. It has almost no intrinsic value. Its veneer of silver is a facade. I offer this as an illustration of the economic and fiscal problems of our country. As a layman, I cannot argue economics with the professionals. But in over 40 years of businesslife as a worker and a manager, my checkbook has been balanced regularly and there is a small reserve for a rainy day.

That is more than can be said for the Federal Government.

It seems ridiculous to increase the Federal debt to permit borrowing to pay bills for day-to-day operations.

I come to offer a specific recommendation to help meet the problem of my tax burden and to help restrain an increase in the Federal budget. Very simply this: Deauthorize the O'Neill unit/Norden Dam irrigation project in north-central Nebraska. The bureau's figure of $335 million, based on a 3¼-percent interest cost, is underrated. If you use a realistic cost of money—7 or 10 or 12 percent—the savings by deauthorizing Norden could be in excess of $600 million. This action would attack the fiscal problems of our country by the simple process of not generating a new expenditure.

This project will permanently take out of service 30,000 acres of one man's land to serve about 77,000 acres of another man's land. Property rights of one citizen will be ignored to enhance the property value of another at the expense of all taxpayers.

About half of the land to be served—77,000 acres—is already irrigated and already providing high yields of corn.

The taxpayer cost of the improvement will range from $4,000 to $8,000 per acre for land that is now taxed at $700, $800, $900 per acre. Only a fraction will be paid by the landowner over a period of 50 years. Most of the cost will be paid by users of electric power in eight States, about 8 percent of the stated figure, and not by the landowners. That power comes from the Missouri River basin hydroelectric plants.

We cannot buy what we cannot afford. We cannot afford all the government we are already paying for, and we cannot afford $335 million for Norden.

I ask you, let's pay off the bills we owe now. Please do not allow spending for Norden Dam. The taxpayers do not need any more of that kind of help.

Mr. Fred Schreier?

Chairman HATFIELD. Are you speaking for the whole panel now, Mr. Jaksha?

Mr. JAKSHA. No.

Chairman HATFIELD. I invited the whole panel up here for the 10-minute allocation.

Mr. JAKSHA. I am sorry. We didn't understand that. If you will let them come up, we have stopwatched our time.

Chairman HATFIELD. I invited them up earlier. I just didn't know what happened to them.

I want you gentlemen to know we have heard more testimony on this project than any other project. We have had 1 hour and 20 minutes already on this one project.

Mr. JAKSHA. Tell us what you want to do.

Chairman HATFIELD. We are saturated with this O'Neill project. I have almost become an opponent by the sheer amount of testimony we have received. [Laughter.]

Mr. JAKSHA. We invite you to join us.

Chairman HATFIELD. Who else wants to be heard on this project?

Dr. Ty Harrison, are you next? Mr. Jaksha used about 7 of your 10 minutes already.

Mr. HARRISON. Members of the Senate Energy and Water Development Subcommittee, thank you for the opportunity to appear before you. My name is Ty Harrison. I am a biologic professor at the University of Nebraska in Lincoln and a professional ecologist. I am here to testify against continued funding of the appropriations for the O'Neill unit in the Pick-Sloan basin plan in Nebraska. I am representing here today three groups—first, The Nature Conservancy, who is the primary landowner in the project, the reservoir area; second, the students and faculty of the University of Nebraska, present and future, who are concerned about environmental values in Nebraska; third, I am speaking for the unique native plants and animals in the project area which have had no voice in the past political and economic decision process concerning this environmentally destructive project.

Based on recent research of my own, the value of northcentral Nebraska is one of the most scientifically important in all of the Great Plains of North America.

The most striking feature of the Niobrara Valley is the co-occurrence of six distinctly different major vegetation types. All this is precisely where the proposed Norden Dam would be located. There are few places in North America which have this kind of habitat and floristic diversity in such a small distance.

Because of this admixture of distinct vegetation types, the Niobrara Valley can justifiably be called the botantical crossroads of the Midwest. The presence of rare plants or plants at the edges of their North American distributions in the Niobrara Valley has long been noted by Nebraska botanists and is of considerable scientific and educational importance on the State and national level.

The Niobrara Valley serves as the distributional limit for approximately 160 plant species, many of them extremely rare in Nebraska.

The biota typical of Eastern deciduous forests comes into contact with the Western biota such that this overlap or mixture of habitats allows for extensive hybridization, especially in Eastern and Western bird subspecies of flickers, orioles, and grosbeaks.

A significant and essentially undescribed natural experiment, where native organisms interact, hybridize, and evolve on the edges of their respective adaptive ranges, would be totally and forever eliminated. This question has never been seriously addressed or discussed in any of the studies or controversy involving the proposed Norden Dam. To a biologist, this natural hybridization situation in the Niobrara Valley is a scientific resource of major value which would be destroyed by the proposed project.

Thank you.

Chairman HATFIELD. Thank you, Doctor.

I don't know who else is here to testify on this.

GAO REPORT

Mr. HOFFMAN. Mr. Chairman, I am representing the Nebraska Chapter of the Sierra Club. I would like to draw your attention to a recent GAO report which stated that it costs the Federal Government between $54 and $130 an acre-foot each year. This was on six projects that were recently investigated by the GAO. But the crops grown by the farmers will not yield enough revenue to cover the cost. However, the farmers will continue to buy the Federal water because they are charged a price below Government cost.

Although the O'Neill unit was not included in the report, the project is a typical example. As long as Congress is willing to provide such subsidies, economically unsound and environmentally destructive projects such as the O'Neill will continue to be promoted.

Is this project really needed? President Reagan's drive to cut wasteful spending certainly merits this committee's support.

According to project proponents, the project is needed to increase the Nation's food supply. There are between 20 and 21 million acres planted into crops in Nebraska. The O'Neill unit, with its 77,000 acres, is less than 0.4 percent of the total cropland acreage. Since half the project is already irrigated and growing crops, the figure drops to less than 0.2 percent.

Are there better alternatives? According to the U.S. Department of Agriculture, 31 million acres of agricultural land, including 250,000 acres in Nebraska, were converted to urban sprawl, highways, parking lots, and water impoundments between 1967 and 1977. The Nation is still losing 3 million acres a year, including 1 million acres of prime farmland. The emphasis certainly should be placed on preserving productive agricultural land instead of expensive irrigation projects.

The cost of the project invested in techniques to reduce soil erosion and increase moisture retention in the soil would increase food production over the long term and would certainly benefit a wider range of recipients.

Thank you.

Chairman HATFIELD. Thank you.

Any other comments or statements to be submitted?

Mr. SCHREIER. My name is Phil Schreier. I am a businessman in Verdigre, Nebr., and I have lived in that area all of my life. I operate a lumber business in Verdigre that has been in my family for three generations. Verdigre has a population of about 500. It is in northeast Nebraska in Congressman Doug Bereuter's district. I have a home along the Niobrara River.

My neighbors—landowners along the river—and I want to protect our property and a flowing Niobrara River contributes substantially to our property values. Without the O'Neill unit, the Niobrara River provides irrigation water right now for many landowners. I know most of them in my area. They are worried about their supply of water if the O'Neill unit/Norden Dam is built.

Our concern for keeping water in the Niobrara River has prompted me and several of my neighbors to ask our Congressman, Doug Bereuter, to help us stop the O'Neill unit/Norden Dam. We very much appreciate this effort to delete funds for the O'Neill unit, and we are grateful for his continued interest and help. The O'Neill Unit/Norden Dam is not only a third congressional district, Nebraska matter, it concerns all Nebraskans and all taxpayers.

As a taxpayer, money is being taken out of my pocket faster than I can put it in. I just don't believe we can afford another $335 million for the O'Neill unit/Norden Dam which just has to increase my taxes and electric utility bill.

Thank you.

Chairman HATFIELD. Thank you very much.

Mr. FISCHER. I am Lloyd Fischer from Lincoln, Nebr. I am a resource economist. I would like to address the issue here. I would like to simply make a statement that we are operating with resources that are limited. There is competition between the public and the private sector and there is competition among private activities for the resources.

Now within the private sector we use the market system, presumably, and resources go to the highest bidder, who is assumed to be the one who could derive the most benefits from the resources. Now market interest rates reflect what individuals believe they can afford to pay in resources. One who develops groundwater to irrigate his land must take all of the cost of development from the project that is added for irrigation. The cost for a standard project should be the same. The product of irrigation is irrigation water. The question is, will the water yield benefits sufficient to pay the cost of the project?

When the WPRS conducts their economic feasibility studies, they do two analyses, one of which they propose to come out with as to what the irrigators are able to pay for water. They have concluded that that amount is about $20 per acre, which includes not only the charge for the water but the operation and maintenance and repair of the project.

When they conduct an analysis of the same farms to derive the benefit, they come out with more than 10 times that, or over $200. That is simply a slight of hand that an economist can't abide, that there are, somehow or other, derived on benefits 10 times what the farmers are able to pay.

I would like to say that the amount that they come out with in terms of what farmers are able to pay for irrigation water is fairly consistent with the calculations of the economists that I know concerning what irrigation is worth in Nebraska. So the $20 per acre, $20 to $25 per acre, is about what the farmers are able to pay for water.

By the standards that I have set here, it seems to me that that is a measure of what water is worth. Thank you.

Chairman HATFIELD. Thank you very much.

As you know, there is funding in this budget to comply with the court order to EIS inadequacy, as the court has ruled. And, as I understand the situation, the court must rule on the EIS before construction could begin. I don't have any way to predict what will happen once that EIS is completed. As you know, Congresswoman Virginia Smith has been very strong in her support of this project and has worked very hard on this. But I think there will be no doubt very serious review given to this whole project involving the EIS. Thank you very much.

[The statements follow:]

Statement of Phil Schreier, Verdigre, Nebr.

My name is Phil Schreier. I am a businessman in Verdigre, Nebraska and I have lived in that area most of my life. I operate a lumber business in Verdigre that has been in my family for three generations. Verdigre has a population of about 500; it is in northeast Nebraska in Congressman Doug Bereuter's district. I have a home along the Niobrara River.

My neighbors, landowners along the river, and I want to protect our property and a flowing Niobrara River contributes substantially to our property values. Without the O'Neill Unit, the Niobrara River provides irrigation water right now for many landowners; I know most of them in my area. They are worried about their supply of water if the O'Neill Unit/Norden dam is built.

I have witnessed silt build up on the Niobrara, particularly at its mouth. The small town of Niobrara had to be relocated at tax payer expense a few years ago. I believe the same kind of silt build up would occur behind the Norden dam and destroy its usefulness in a short period of time. I have flown over the area and taken pictures of typical silt build up.

Our concern for keeping water in the Niobrara River has prompted me and several of my neighbors to ask our Congressman, Doug Bereuter, to help us stop the O'Neill Unit/Norden dam. We very much appreciate his efforts to delete funds for the O'Neill Unit and we are grateful for his continued interest and help. The O'Neill Unit/Norden dam is not only a 3rd Congressional District (Nebraska) matter; it concerns all Nebraskans and all taxpayers.

As a taxpayer, money is being taken out of my pocket faster than I can put it in. I just don't believe we can afford another 335 million dollars for the O'Neill Unit/Norden dam which just has to increase my taxes and electirc utility bill.

STATEMENT OF TED HOFFMAN, REPRESENTING THE NEBRASKA CHAPTER OF THE SIERRA CLUB

I am Ted Hoffman, representing the Nebraska Chapter of the Sierra Club, testifying this morning in opposition to the O'Neill Unit. A recent GAO review of six federal irrigation projects found that the water produced will cost the government between $54 and $130 an acre-foot each year. But the crops grown by the farmers will not yield enough revenue to cover the costs. However, the farmers will continue to buy the federal water, because they are charged a price below government cost.

Although the O'Neill Unit was not included in the report, the project is a typical example. As long as Congress is willing to provide such subsidies, economically unsound and environmentally destructive projects such as the O'Neill will continue to be promoted.

Is this project really needed? President Reagan's drive to cut wasteful spending certainly merits this Committee's support.

According to project proponents, the project is needed to increase the nation's food supply. There are between 20 and 21 million acres planted into crops in Nebraska. The O'Neill Unit, with its 77,000 acres is less than 0.4 percent of the total cropland acreage. Since half the project is already irrigated and growing crops, the figure drops to less than 0.2 percent.

Are there better alternatives? According to the U.S. Department of Agriculture, 31 million acres of agricultural land, including 250,000 acres in Nebraska, were converted to urban sprawl, highways, parking lots and water impoundments between 1967 and 1977. The nation is still losing three million acres a year, including one million acres of prime farm land. The emphasis certainly should be placed on preserving productive agricultural land instead of expensive irrigation projects.

The cost of the project invested in techniques to reduce soil erosion and increase moisture retention in the soil would increase food production over the long term and would certainly benefit a wider range of recipients.

STATEMENT OF DR. TY HARRISON, ON BEHALF OF THE NATURE CONSERVANCY

The Niobrara region of North Central Nebraska has long been recognized by botanists, plant ecologists, plant systematists and more recently by animal ecologists and systematists as an area having significant biogeographic importance in the Northern Great Plains of North America.

The Niobrara Valley corridor is an important Pleistocene and post-Pleistocene refugium for plant species of northern boreal affinity at their southern limit on the Great Plains, a refugium for eastern deciduous forests and prairie species at their western boundary, and an area also having western plant species directly associated with the Rocky Mountains at their eastern distributional limits on the Great Plains.

The most striking feature of the Niobrara Valley is the co-occurrence of 6 distincly different major vegetation types, all within 1-2 miles proximity of each other. This is precisely where the proposed Norden Dam would be located. There are few places in North America which have this kind of habitat and floristic diversity in such a small distance. (1) Rocky Mountain pine forest biota characterized by ponderosa pine occurs on the steep, rocky, eroding tributaries to the Niobrara River, and is best developed as a vegetation type on the north side of the River although it occures along cliffs on both sides of the river. (2) An eastern deciduous forest biota dominated by oak, elm, ash, linden, and sometimes black walnut occurs along the floodplain and valley of the Niobrara and on Plum Creek. Trees in these valleys are near the streams or along the lower canyon walls where tree roots can reach a permanent floodplain water table or permanent spring seeps. (3) A northern boreal flora characterized by paper birch trees with typical understory sedges together with northern grasses and sedges found near cold, permanent springs are found in favorable microsites only on the south side of the Niobrara. (4) A distinctive mixed prairie grassland occurs on the drier, drought susceptible sandy loam soils developed on the bedrock of the Crookston Table on the north side of the Niobrara River. (5) A less developed tallgrass prairie occurs in portions of the valley. (6) Finally, the characteristic Sandhills prairie with taller, vigorous grasses growing in the deep, unstable, often moist sandy soil of old stabilized sand dunes, characterize the south side of the Niobrara River.

The diverse topography of a deep, rapidly eroding river valley with its different north/south slope microclimates, together with diverse rock formations and their resulting distinct solid types, have created an ecologically unique situation in this area within a characteristically grassland climate.

Because of this admixture of distinct vegetation types, the Niobrara Valley can justifiably be called the "botantical crossraods of the Midwest". The presence of rare plants or plants at the edges of their North American distributions in the Niobrara Valley has long been noted by Nebraska botanists, and is of considerable scientific and educational importance.

The Niobrara Valley serves as the distributional limit for approximately 160 plant species, many of them extremely rare in Nebraska. The eastern deciduous forest component is strongest due to proximity of the Missouri River. Eighty three species of the eastern forests or forest margins and prairies reach their western limit in the Valley. This whole biotic type is especially important biogeographically and uniquely at risk since the proposed Norden Dam will remove most of this vegetation type from its western distributional limits in North America in the western portion of the lower Niobrara Valley. This is of special biological concern since it is this precise area where the eastern outliers of Rocky Mountain coniferous forest biota is most extensive on the Crookston Table immediately north of the Niobrara River.

The biota typical of eastern deciduous forests comes into contact with the western biota such that this overlap or mixture of habitats allows for extensive hybridization especially in eastern and western bird subspecies of flickers, orioles, and grosbeaks. Any interruption in habitats, especially by elimination of deciduous gallery forests along major streams by large impoundments, significantly interferes with this process of natural hybridization between eastern and western taxa. The imposition of a 20 mile long reservoir would be a major ecological catastrophy since the proposed reservoir is positioned exactly in the region of greatest overlap of these two major biotic types.

Important plant species typical of a northern floristic element occur in the Niobrara Valley. We have identified 42 species which have important southern distribution limits. Paper birch is typical of this northern element and occurs here 200 to 400 miles distant from its main populations in the Black Hills of North Dakota and northwestern Minnesota. The Niobrara paper birches are found only in cool, sheltered, shady springbranch canyons or spring fed seeps along steep canyon walls only on the south side of the Niobrara Valley.

A significant and essentially undescribed natural experiment, where native organisims intereact, hybridize and evolve on the edges of their respective adaptive ranges, would be totally and forever eliminated. This question has never been seriously addressed or discussed in any of the studies or controversy involving the proposed Norden Dam. To a biologist, this natural hybridization situation in the Niobrara Valley is a scientific resource of major value which would be destroyed by the proposed project.

STATEMENT OF ED JAKSHA, PRESIDENT, NEBRASKA TAX LIMIT COALITION

MR. CHAIRMAN: I AM ED JAKSHA FROM OMAHA, NEBRASKA. MY ACTIVE EMPLOYMENT INCLUDED REAL ESTATE MATTERS AND WORKING WITH NEBRASKA COUNTY ASSESSORS AND THE PROPERTY TAX DIVISION OF THE NEBRASKA STATE DEPT. OF REVENUE. THE NORDEN DAM AREA IS FAMILIAR TO ME.

I AM PRESIDENT OF THE NEBRASKA TAX LIMIT COALITION. THIS IS A CITIZENS' ORGANIZATION WHICH ADDRESSES ITS ACTION TOWARDS MATTERS OF GOVERNMENT SPENDING AND TAXES. OUR PRESENT MAILING LIST TOTALS OVER 20,000 HOUSEHOLDS.

FOR MYSELF, FOR MANY FRIENDS AND SUPPORTERS, I AM REPORTING THAT WE ARE SICK AND TIRED OF NEVER ENDING TAX INCREASES BY ALL LEVELS OF GOVERNMENT - AND THE CONTINUING INTRUSION BY GOVERNMENT INTO OUR LIVES. AS TAXPAYERS, WE SUPPORT PROGRAMS, SERVICES, AND PERSONS IN GOVERNMENT. AS CITIZENS, WE INSIST IT IS OUR PRIVILEGE TO SEEK CONSTRAINTS IN LAWS AFFECTING US; IN THE AMOUNT AND DETAIL OF GOVERNMENT SPENDING, AND TO TELL YOU THAT THE PORTION OF OUR INCOME TAKEN FOR TAXES IS TOO GREAT.

WE ARE ASKING YOU TO TAKE LESS, AND TO SPEND OUR MONEY MORE WISELY.

WITH YOUR COPY OF THIS TESTIMONY, I HAVE ATTACHED A SUSAN B. ANTHONY DOLLAR. OUR LOCAL POST OFFICE ADVERTISES THE "SUSAN B" AS THE DOLLAR OF THE FUTURE. IF THIS IS THE CASE, WE MAY ALL REALLY BE IN TROUBLE.

- The people have refused to honor "Susan B" in this business.
- It has almost no intrinsic value.
- The veneer of silver is a facade.

Since 1960, the purchasing value of a dollar is calculated to have dropped about two thirds.

I offer this illustration as a demonstration of the economic and fiscal problems of our country. As a layman, I cannot argue economics with the professionals. But in over 40 years of business life as a "worker" and a "manager" my checkbook has been balanced regularly and there is a reserve for a rainy day.

That is more than can be said for the federal government.

In my opinion, government spending must be reduced, and limited to a level taxpayers can afford. It seems rediculous to increase the federal debt to permit borrowing to pay bills for day-to-day operations. Your constituents cannot operate in this manner - how can you impose the tax burden of unwise management on your constituents?

I come to offer a specific recommendation to help meet the problem of my tax burden - and to help restrain an increase in the federal budget. Very simply, this:

Deauthorize the O'Neill Unit/Norden dam irrigation project. The Bureau's figure of 335 million dollars, based on a 3¼% interest cost is underrated. If you use a realistic cost of money - 7% - 10% - 12% - the savings by deauthorizing Norden could be in excess of 600 million dollars. This action would attack the fiscal problems which we must not avoid - by the simple process of not generating a new expenditure.

You are hearing many numbers - I cite only a few -

This project will permanently take about 30,000 acres of "one man's land" to serve about 77,000 acres of "another man's land". Property rights of one citizen will be ignored to enhance the property value for another at the expense of all taxpayers.

ABOUT HALF OF THE LAND TO BE SERVED (77,000 ACRES) IS ALREADY IRRIGATED - AND ALREADY PROVIDING HIGH YIELDS OF CORN.

THE TAXPAYER COST OF THE "IMPROVEMENT" WILL RANGE FROM $4000. TO $8000. PER ACRE. ONLY A FRACTION WILL BE PAID BY THE LANDOWNER - OVER A PERIOD OF 50 YEARS - MOST OF THE COST WILL BE PAID BY USERS OF ELECTRIC POWER IN EIGHT STATES - THAT POWER COMES FROM THE MISSOURI RIVER BASIN HYDRO ELCTRIC PLANTS.

WE CANNOT BUY WHAT WE CANNOT AFFORD. WE CANNOT AFFORD ALL THE GOVERNMENT WE ARE ALREADY PAYING FOR - AND WE CANNOT AFFORD 335 MILLION DOLLARS FOR NORDEN.

AT THE "GRASSROOTS" WHERE I COME FROM, MANY PERSONS WONDER "HOW SOON", NOT "IF" BUT "HOW SOON", OUR COUNTY MAY REPEAT THE THE FOLLIES OF THE REPUBLIC OF GERMANY OF THE 1920'S.

LET'S PAY OFF THE BILLS WE OWE NOW.

PLEASE DO NOT ALLOW SPENDING FOR NORDEN. THE TAXPAYERS DO NOT NEED ANY MORE OF THAT KIND OF HELP.

THANK YOU.

STATEMENT OF JOHN R. FLICKER, DIRECTOR, GREAT PLAINS OFFICE, THE NATURE CONSERVANCY

The Nature Conservancy is a national non-profit conservation organization with over 100,000 members. We are active in every state and in several foreign countries. The purpose of The Nature Conservancy is to preserve unique and fragile natural habitats in an effort to maintain natural diversity. We accomplished this objective largely through land acquisition. The Conservancy owns and manages some 700 preserves nationally.

The Nature Conservancy is not an advocacy organization. We are not an anti-growth organization. We do not bring to this Subcommittee an idealogical bias against water development.

The Conservancy owns all of the property on which the proposed Norden Dam be located, and most of the property which would be inundated by the reservoir behind the proposed dam. The property is known as the Niobrara Valley Preserve. The total Preserve consists of approximately 54,000 acres. It is the largest and one of the most significant preserves owned by the Conservancy. The proposed dam and reservoir would destroy the most significant portions of the Preserve. Information about the scientific and educational importance of this particular property is being presented in more detail in the testimony of Dr. Ty Harrison on behalf of The Nature Conservancy.

The Nature Conservancy joins other landowners in the area in opposing this project.

The proposed project is bad for the environment. It will destroy one of the most ecologically unique areas in the country. It will also destroy the 54,000 acre Niobrara Valley Preserve which has been set aside by The Nature Conservancy for use by the public at no cost to taxpayers.

We respectfully request that funding for the continuation of this project not be approved.

JOINT STATEMENT OF LLOYD K. FISCHER AND BRUCE B. JOHNSON, LINCOLN, NEBR.

The benefit/cost analysis performed by the Water Power and Resources Service for the proposed O'Neill Unit fails to meet professional standards for an economic feasibility study. A number of invalid assumptions and unacceptable procedures result in a substantial overstatement of the projected irrigation benefits. This brief paper will examine procedures used by WPRS analysts in the economic feasibility study and demonstrate the impact on the resulting B/C ratio of adjusting to more reasonable assumptions and to analytical methods which are more consistent with accepted economic analysis.

In their benefit/cost analysis for the O'Neill Unit, WPRS analysts devised budgets for three hypothetical farms for the year 2010. Two of the budgets are of farms, which are intended to be representative of those to which project water is to be delivered. One of these "with project" farm budgets assumes on-farm distribution of water by gravity and represents 76% of the acreage irrigated with project water. For the remainder of the irrigated acreage, the other "with project" farm budget reflects on-farm distribution of water by center pivot.

The third farm budget purports to be representative of farms in the project area in the absence of the O'Neill Unit. The difference in projected income between the "with project" and the "without project" farms is divided by the acres irrigated on the "with project" farms. This figure is then multiplied by the number of acres to which project water is supposed to be delivered to derive the estimated annual irrigation benefits over the life of the project. A point requiring emphasis is that the income from all enterprises on the "with project" farms, including cattle feeding, is claimed as an irrigation benefit.

All three of the representative farms are 1040 acres in size with 400 acres of cropland in corn and alfalfa. On the "with project" farms, 200 acres of the cropland is irrigated. The "without project" farm has no irrigation. The net income derived from the various farm budgets is, as follows:

"With project" farm (200 acres irrigated)

Gravity irrigation - $47,737

Center-pivot irrigation - $44,055

"Without project" farm (dryland) - $3,468

The irrigation benefits, which are calculated from the above data, are added to modest non-irrigation benefits to derive the total annual project benefits. The most recent WPRS estimate of total benefits is $17,406,000 per year. The annual cost of the project is estimated by WPRS to be $12,002,852, yielding a benefit/cost ratio of 1.5 to 1.

As indicated above the assumptions and methodology by which WPRS analysts calculated benefits are seriously flawed. Among the most blatant errors is that of claiming as an irrigation benefit the profits from cattle feeding. In their most recent estimate, 31 percent of irrigation benefits are from this source. Historically, over two bushels of feed grains are produced in the project area for each bushel fed to livestock. Quite obviously, dryland farmers, or those who produce no crops at all, could purchase grain to feed cattle if they chose to do so. Clearly, in that area lack of feed grains is not a factor which limits cattle feeding. In any case, the corn produced on land irrigated by project water is worth no more than the price at which corn can be sold, or purchased. The purpose for which the corn is used, and the location of such use, does not affect project benefits. Deletion of the cattle-feeding profits from the benefits claimed reduces the B/C ratio to 1.0 to 1.

A second serious flaw in the estimation of benefits is the projected level of yields. Table 1 presents two budgets for center-pivot irrigated corn for 1980. One budget is from the WPRS farm budgets for the O'Neill Unit; the other was prepared by the University of Nebraska farm management specialists for the same area. Above average management is assumed for the UNL budget; since average yields of irrigated corn in the project area are well below the assumed 130 bu./ac.

Table 1. Comparison of Budgets for Center-Pivot Irrigated Corn Prepared by the WPRS and by Farm Management Specialists, University of Nebraska.

Cost Item	WPRS Budget[a]	UNL Budget[b]
Purchased Inputs	$187.14	$151.73
Labor	14.40	11.47
Machinery & Equipment (fixed)	54.22	98.40
Land Cost	39.89	24.50
Overhead and Management	4.82	20.59
Total	$300.48	$306.57
Estimated Yield Per Acre (Bu.)	191	130
Cost per Bushel	$1.57	$2.36

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[a] Based upon unpublished farm enterprise budget for a 170 acre corn enterprise under center-pivot irrigation.

[b] 1980 corn enterprise budget for typical Northern Nebraska farms with 390 acres of irrigated land. Source: Estimated Crop and Livestock Production Costs, Nebraska, 1981, Department of Agricultural Economics, University of Nebraska-Lincoln.

Despite a lower cost of production in the WPRS budget, the assumed yield is nearly 50 percent higher than the yield in the UNL budget. As a consequence, the cost of producing a bushel of corn is a full 50 percent lower. This yield becomes even more suspect when other factors are taken into account, as follows:

1) The land to which project water is to be delivered is, on the average, inferior in quality to that which is now being irrigated. Only 12% is Class I by WPRS standards;
2) The project, as designed, will be incapable of providing water service adequate to prevent moisture stress in years of average, or below, precipitation; and
3) The assumption that 76% of the project will be irrigated by gravity fails to recognize that the soils of the area, and particularly those not now irrigated, are extremely sandy and are far from level. The rapid irrigation development in the area in the last decade has been exclusively by center-pivot.

All logic suggests that either a) the projected yields be substantially reduced or b) the costs of production be adjusted to reflect the level of inputs required to achieve such a spectacular average yield.

Adjustment of the projected yields of irrigated crops to a more reasonable 139 bu./ac. for corn and 4.3 tons/ac. for alfalfa (from 6.6 tons/ac.) would reduce the B/C ratio to 0.8 to 1. Combining this adjustment with deletion of cattle feeding enterprise reduced the B/C ratio to 0.33 to 1.

A third obvious discrepancy in the WPRS economic feasibility study is the number of acres for which full irrigation benefits are claimed. The WPRS is claiming benefits from 77,000 acres. Yet according to a survey conducted by the Center for Rural Affairs of Walthill, Nebraska, 42% of the land petitioned to receive project water is already being irrigated from groundwater. Of the remaining land, within the boundaries of the irrigation district, 56% are currently irrigated. Furthermore, according to the Final Environmental Impact Statement, Supplement 2, 80% of the acreage now irrigated could continue to be irrigated into the forseeable future from natural recharge.

The assumption of no irrigation on the "without project" farm implies that irrigation will continue into the future only if the project is built. Reality is quite different. An alternative projection that only a modest 25% of the currently irrigated land would continue to be irrigated without the project would reduce the B/C ratio to 1.1 to 1. Combining this adjustment with the previous adjustments yields a B/C ratio of 0.27 to 1.

The above are only illustrative of discrepancies in the WPRS economic feasibility study for the O'Neill Unit. Other weaknesses, some of which have been alluded to, would include, the following:

1) Estimates of water availability for the project are based on flows of the Niobrara River from a period ending in 1956. Because of irrigation upstream, and perhaps other factors, the annual flow of the river has been declining ever since. All indications are that the decline will continue.

2) The proportion of the water turned out at the reservoir, which WPRS analysts assume will be delivered to the irrigators (i.e., 73 percent), is totally unrealistic. The actual loss of water from the distribution system, if the project is built, would more likely be double that estimated by the WPRS.

3) Even with the projected high delivery efficiency, the system does not have the capacity to provide adequate water services to 77,000 acres. Simple arithmetic demonstrates that corn, growing on the sandy soils, will often be subject to moisture stress, particularly during the critical part of the growing season. Moisture stress, if it occurs at a vulnerable stage of plant growth, will reduce yields, sometimes drastically.

4) The estimated costs of construction of the project over the years have been adjusted for inflation at a rate much lower than the rate of increase of construction costs. Actual costs of construction, not counting inflation, will almost surely be much higher than current estimates.

5) The estimated costs of Operation, Maintenance and Repairs of the project is unrealistically low and inconsistent with that experienced in other WPRS irrigation projects.

6) The WPRS calculation of the irrigator's capacity to pay for irrigation water is less than 10 percent of WPRS estimates of the benefits to be derived from irrigation. How can irrigation be worth 10 times as much as irrigators can afford to pay for it? With the proposed repayment schedule, irrigators will pay less than three percent of the currently estimated cost of the project.

The above list is far from exhaustive but should demonstrate why WPRS claims of benefits from the O'Neill Unit are not persuasive. The project is uneconomic as an investment. It fails by a wide margin to meet the standards which would be required by any proposed investment of private resources. On what basis, can a proposal for a public investment be subjected to a less rigorous analysis than would be required by any prudent private investor? Some idea of the magnitude of the overstatement of benefits by the WPRS is likely reflected in the difference between their estimate of the irrigators ability to pay for water (i.e., $20.00 per acre) and the benefits claimed (i.e., over $200 per acre). If the full cost of the project, including the true cost of money, were taken into account, the benefits would be less than 10 cents for each dollar of cost. Diversion of resources from the private to the public sector for such an ill-advised project cannot be supported or condoned.

CENTRAL AND SOUTHERN FLORIDA, HENDRY COUNTY PLAN—OPPOSITION

STATEMENT OF JOHN JONES, EXECUTIVE DIRECTOR, FLORIDA WILDLIFE FEDERATION

ACCOMPANIED BY BUBBA MILLS

Chairman HATFIELD. Mr. John Jones, executive director, Florida Wildlife Federation, and Mr. Bubba Mills.

Mr. JONES. Mr. Chairman, I am John Jones. We are happy to be here.

Chairman HATFIELD. We have your statements, gentlemen. Now if you will just highlight them, please.

Mr. JONES. Mr. Chairman, I am John Jones. I am executive director of the Florida Wildlife Federation, located in West Palm Beach, Fla. I don't intend to read this statement. You have the statement for the record.

Chairman HATFIELD. Yes.

Mr. JONES. I just want to make some comments to you taken from the statement and maybe a few more that I have found out about since the statement was written.

First of all, it is our view that the Hendry County plan is a blatant Federal subsidy for a project that is only going to benefit, according to the EIS statement, 21 landowners, when, in fact, I have been over the place, I have been over the landownership maps, and the truth is there are only six major landowners in the area. As a matter of fact, three landowners own about 90 percent of the land there. They own the vast majority of the land. It appears to me that this is a rather blatant subsidy for these large landowners.

In the statement it says that the project will cost $11 million. The Florida Division of State Planning says it will cost $28 million. That was 3 years ago. I would rather see the Government give each one a million dollars apiece and save $7 million and forget about it.

We have several members of Hendry County who are ranchers. One is here today, Bubba Mills. I can guarantee you that the people in Hendry County don't care about it. When we had a public hearing in Broward County—you know, I don't know why they call it the Hendry County plan. It should be called the "U.S. sugar plan," because they have over 100 square miles here within this project. They bought some swamp down there they want to drain and they want the Federal Government to do it for them at the taxpayers' expense. That is what it is all about. When we had a public hearing on the permit—see, for our county it is half of the project—300 people showed up and not one single person from Broward County supported it. I don't know how many hours, it seemed like 5 or 6 hours, it took to take the testimony. Everybody was angry about it. Broward County unanimously rejected the project. You have the resolution from Broward County attached to my statement. Only the few people who are the beneficiaries of this project were there to support it, along with their county commission.

I think in all honesty that dealing with all State and Federal agencies that operate within Florida, and every one of them has drilled holes to the Florida Wildlife Federation, that their staff is very much opposed to the project. It will not meet Federal water quality standards. It will pollute the Biscayne aquifer, which is the sole source for fresh water for south Florida, mostly Dade and Broward Counties. Over 3 million people depend upon that water supply. Even the department of environmental regulation, who originally was supporting this project—and I am very pleased to say that I got a call last night, or Mr. Mills did, at the hotel saying that Vickie Tschinkel, the new secretary of the State Department of Environmental Regulation, has just rejected the Hendry County plan, so it will not be permitted by the State agencies. If it is not going to be permitted by the State agencies, there is no reason to appropriate $5 million this year to appropriate a project that is not permitted.

The Hendry County plan is not a benefit to Hendry County residents; it is not a benefit to neighboring counties. It is a sweetheart deal for U.S. sugar corporations and a few other land barons—people who have fattened the campaign coffers of the politicians who are supporting this project. That is the only people who are supporting it. So, with that, Mr. Chairman, I——

Chairman HATFIELD. With that, you have taken the full time of your panel.

Mr. JONES. I thank you. Mr. Mills?

Chairman HATFIELD. We will have to end up with the people on the latter part of the schedule being heard only by staff, because I have a meeting I have to get to. So let me caution you that when we allocate a certain period of time for the panel, the first speaker should not take up the time if he wants the other people to be heard. I will be happy to listen to an additional minute or two.

Mr. HOFFMAN. I am Ken Hoffman, their attorney. I want to put some materials in the record, if I may.

Chairman HATFIELD. Fine. All of the material will be included following your remarks today.

Mr. Mills.

Mr. MILLS. My name is Bubba Mills. I am a fifth generation rancher and farmer. I live on this proposed C-139. We own 24.5 sections of land in Hendry County. That is how we make our livelihood. The only livelihood we have is farming. Our ranches and our land and our timber operations are somewhere up the river.

I want to comment that we are strongly opposed to this canal. This was conceived in the 80th Congress in 1952, and we think forevermore and forevermore it should be sunset, dead. This proposed canal is of no value.

The first thing we did after we found out this new canal was going to be dug is I went to a good firm in Palm Beach. I asked for an unbiased opinion. I said:

> Colonel G., you know the water. You come to my ranch. I will show you where the canal is going to be. I want you to give me an unbiased opinion so what I say is true and accurate. Everything I have said in the past I can back up. I will show it to you. It is worth a $20 million trip to get down there and kill this project.

I am not against the project. We are in dire need. Our cattle get out there and they are drowning. On one side our cattle will go out there and all the hide and hair will be out of them. They will be scalded to death. You stand on top of this levee and look across to our friends that are sitting in drainage ditches that have access to all of it. I pay taxes for one side as well as the other. We have been taxed with no representation.

I think it is time now after 28 to 30 years that we have a good project or no project. This is a strong feeling. It is hard to stand up there and look over on one side where it is water controlled—water in, water out—and everybody's cattle doing good, all kinds of truck crops, and to look over there across the dike and there we are drowning. All we have done, all our dragline work, all of our pumps, are washed away. It is total chaos.

The thing I am trying to point out to you is, I said on one side it is plain dry; on the other side it is impounded. I have pictures to back this up. I have documented evidence.

It is a known fact in Florida. If the people down there don't know it, they sure don't need to be up here in Washington making decisions, that we ought to have water in and water out in these great big canals that have been dug. This water in, no water supply out, that is just gone. Flood control is gone. I am for water management, but I am not for flood control or just a one-way proposition.

What it is is our livelihoods depend on this thing. We are in strong opposition to it. If there is any way in the world you people could hear us and understand—but what it is, you take just like a strip of land down there. We own two and a half sections below Lincoln. One section of land is on this canal. But they own 150 square miles of land upstream from it. They are not going to be hurt. They took 20 acres of Oleko's land, and he is a friend of mine in that company. I am not speaking against Oleko or the Sugar Co. I am speaking just for myself and my ranch and my little children and people like that that I hope some day will inherit this land and it will be a nice piece of land to inherit. On our land they have taken 105 more feet, a 505-foot strip.

Thank you, sir. I hope you heard what I had to say. We are in strong opposition to it and we would like to have a project, but this is a no-good project. I would like to see it killed now and forevermore.

Chairman HATFIELD. Thank you. I got the message. [Laughter.]

Mr. MILLS. Thank you, sir.

Chairman HATFIELD. Excellent testimony.

[The statement follows:]

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

BROWARD COUNTY,

Petitioner,

and

FLORIDA WILDLIFE FEDERATION, INC.,

Intervenor-Petitioner,

-vs-

DEPARTMENT OF ENVIRONMENTAL
REGULATION and SOUTH FLORIDA WATER
MANAGEMENT DISTRICT,

Respondents,

and

ALICO, INC., HILLARD BROS. OF FLORIDA
INC., EVELYN JACKMAN AND SONS, INC.,
AND ROBERT DICKSON,

Intervenors-Respondents.

CASE NOS. 80-1048
80-1049
80-1460

PROPOSED RECOMMENDED ORDER OF PETITIONER BROWARD COUNTY

Petitioner (in cases 80-1048 and 80-1049) BROWARD COUNTY, by and through undersigned counsel, proposes the following recommended order in DOAH cases 80-1048, 80-1049 and 80-1460.

Cases 80-1048 and 80-1049 were initiated by Broward County against the Florida Department of Environmental Regulation (DER) and the South Florida Water Management District (SFWMD) and seek, as their ultimate goal, to prevent DER from authorizing construction of a drainage and flood control project which begins in Hendry County and ends in Broward County, and which will deposit large amounts of water, increasing flow over short duration, into the northwest corner of Broward County known as Conservation Area 3A. DER has issued a notice of "Intent to Issue" dredge and fill and water quality permits, pursuant to Chapters 253 and 403, Florida Statutes, and notice of its intent to grant an exception from water quality standards, both dated May 20, 1980. After the filing of these petitions, DER partially changed its position and by letter dated June 26, 1980, amended its "Intent to issue" and stated that it was required by Section 403.182(6), Florida Statutes, to enforce the more stringent standards of the Broward County local pollution control program. This amended notice was challenged by SFWMD and certain landowner intervenors in what is now Case No. 80-1460.

The three cases are inexorably intertwined, with overlapping issues, and the below findings of fact and conclusions of law are applicable in all three cases. The cases were consolidated by order dated September 10, 1980. The findings of fact and conclusions of law will, where possible, be separated by issue. Reference to the transcript will be preceded by the letter "T". Reference to exhibits will be preceded by the abbreviation "Ex." followed by the number of the exhibit.

FINDINGS OF FACT

A. In General

1. Respondent, SFWMD, on behalf of itself and the United States Army Corps of Engineers, has filed its application with the Department of Environmental Regulation to construct canals 139 and 139 South in Hendry and Broward counties and structure 239 in Broward County. (DER permit file, in evidence as Ex. D-1.

2. The application indicates that the application is for a dredge and fill permit which proposes construction of a canal and levee to replace an existing canal and levee in Hendry and Broward counties. The location of the work is shown on attachments to the application which include 11 sheets.

3. Sheet 2 of the 11 sheets attached to the application shows a profile at structure 239 and indicates that fill below the mean high water line will include 4,400 cubic yards of material.

4. The design engineer for the SFWMD, Lee M. Brown, testified that the proposed C-139 canal is an enlargement of the existing borrow canal system through Hendry County and into Broward County (T. 33). The structure 239 which would be constructed in Broward County, is a spillway designed like a dam to keep water at a certain level, and supposedly to keep the water at an elevation of 15.5 feet mean sea level. (T. 33-35).

5. Structure 239 is a large structure constructed on reinforced concrete with two large slide gates operated from an elevated platform above the structure (T. 42). The superstructure will be placed across the canal and tied back to the bank (T. 43). This requires placing 4,400 cubic yards of fill below the mean high water line (T. 43).

6. Structure 239 is a standard vertical lift gate on a reinforced concrete structure which is built within the canal (T.132).

7. The canal, in the northwest corner, in Hendry County, will have a bottom width of 5 feet with a side slope of 2 to 1 with the top being 50 feet across (T. 162). Just south of the north Alico canal, the bottom is 25 feet and goes 30 feet at elevation 0. At the southern end of the canal the bottom width will be 40 feet at zero elevation, with the top of the canal about 115 to 120 feet across (T. 163). The structure will be 54 feet across (S. 239), plus the width of the concrete super structure, or approximately 60 additional feet. The difference between the 60 feet and the 120 feet distance across the canal will be filled in by a sheet pile cutoff walls with embankments (T. 165-166). There will be a roadway out to the structure from both sides of the canal. (T. 166).

8. Approximately 3 to 4 miles of the proposed canal project extend into Broward County (T. 192).

9. The project is designed primarily to aid 22 major landowners and a number of smaller landowners (T. 204).

10. The costs of the proposed project are to be shared by the federal and state governments (taxpayers) at a ratio of 80.5 percent federal, 19.5 percent local. (T. 204, 206). At the time of the hearing the projected cost of the project, excluding maintenance, was $14 million. (T. 892, 893).

11. Prior to construction of the existing levees, there was impoundment of water in the same area. The only difference was that it was sheet flow and did not become stagnant. (T. 96).

12. According to one of the Respondent's witnesses, Mr. F. M. Pruitt, a professional engineer and land surveyor, with extensive experience in the geographical area, the project could possibly overdrain property, including that of landowners such as Mr. Bubba Mills. (T. 99). He agreed that the natural result of moving water off peoples' land faster was that it would make other peoples's land dryer. (T. 100).

13. The amount of water discharged in the conservation area 3 will not change significantly, but the peak rates at which it flows will be changed (T. 124).

14. After completion of the project the runoff rate will be doubled. (T. 891-892). There would continue to be standing water and a flooding problem, although it will be of shorter duration. (T. 155).

15. Only 4% of the land area now supposedly affected by flooding would be sufficiently relieved by the project to allow higher use of the property. (T. 295-296).

16. The project will have a negative impact on deer herds in conservation area 3A, alligator nests and other animals (T. 480) and

will be detrimental if there is a high discharge during a time of high water in conservation area 3A (T. 486).

17. The Florida Game and Fresh Water Fish Commission has not approved this project and questions the timing of delivery of water to conservation area 3A.(T. 526-528). The problem is that increasing water when there is already heavy water "stresses the species by depriving them of areas that they can safely stand up." (T. 529).

18. The proposed canal system would add in excess of 23 acre fee of water to the northwest portion of conservation area 3A in a ten year storm over a 9 day period. This is .39 feet over 93 square miles. This is about 5 inches, but would certainly be a lot deeper at the initial input area. (T. 534).

19. Mr. E. C. "Bubba" Mills, a rancher from LaBelle, who owns 12-1/2 sections in the area known as Flaghole Ranch and 2-1/2 sections in an area called Williams Place, and another 1 section known as Tony's Mound, testified that he owned 24-1/2 sections in the area or about 15,680 acres. He testified that he uses land for timber and cattle and owned 7-1/2 miles along the proposed canal project. (T. 650). He stated "I don't think Hendry County should ask Broward County to take this water when Hendry County is very capable of taking care of its own peoples' problem. Why should these taxpayers down here be encumbered to pay for our problem when we are able to take care of them our ownselves?" (T. 677-678).

He Continued, at page 679:

> "It is a waste of assets. It's something that shouldn't be done."

He testified from experience to flooding of the conservation area and that this project would make it worse. (T. 681-682). He added, "we don't have to learn it again, you don't have to spend 20 million to learn that damn mess over again." (T. 682).

He testified that the effect of the proposed system would be to severely overdrain his land (T. 683). He said that when there are floods, ranchers such as Alico and himself can move their cattle to other areas. (T. 684).

When asked if he opposed the project, he said "Yes, sir. Strong." (T. 685.) He added, also at page 685:

> "Whenever you get through digging and doing the proposed digging, you are still going to have a monster, except its going to be gold plated. It will be a Cadillac of monsters. That's really, theoretically, what you've got."

He added that his land will be overdrained because there is no other source of water other than the overflow water and when the land is dry and the canal dry, there will be no seepage water to maintain any level of water or head and his land will be overdrained. (T. 690-691). (See also: T-312, where SFWMD water resource planner Peter Rhoades reluctantly concedes the same point.)

20. Mr. Walter R. Howard, the vice president and comptroller of Intervenor, Alico, testified that when there were major rainstorms and flooding, their (Alico) problems of flooding were easily resolved because "the cattle were moved west to the higher elevation land." (T. 843). This testimony confirmed that of Mr. Mills, and was uncontradicted.

B. Requirement of Section 403.182, Florida Statutes, that *DER enforce more stringent local water quality standards.*

This issue was raised by Broward County at Count III (paragraphs 16-28) of its petition in Case No. 80-1049. After the DER changed its position to agree with Broward County, SFWMD and certain intervenors petitioned in Case No. 80-1460 for a determination that the local standards did not apply. The issue of whether water quality regulations of the Broward County Environmental Control Board must be applied by DER to evaluate this permit application is thus raised in both case No. 80-1049 and 80-1460. The following findings of fact include judicial notice of statutes and special acts.

21. Section 403.182, Fla. Stat., authorizes each county to establish a local pollution control program which must be approved by DER. Under subpart (2) of this Section, permitting authority is retained within DER, but may be delegated.

22. Section 403.182(6), Fla. Stat. provides, among other things, that "Whenever rules, regulations, or orders of a stricter or more stringent nature have been adopted by a local pollution control program, the department, if it elects to assert its jurisdiction, *shall* then enforce the stricter rules, regulations, or orders in the jurisdiction where they apply." Thus, an *affirmative duty* is placed upon DER *by statute*, to enforce the stricter local standards.

23. Broward County has an approved local pollution control program. (Ex. E-1). The history of the Broward County pollution control program, now under the jurisdiction of the Broward County Environmental Control Board (hereinafter EQCB) is as follows:

Chapter 65-1338, Laws of Florida, Special Acts of 1965, filed in the Office of the Secretary of State, June 25, 1965, was known as the Broward County Air and Water Pollution Control Act, (hereinafter "Act.")

Section 4 of the Act authorized the Broward County Board of County Commissioners to create the Broward County Pollution Control Board.

Section 6(b) enumerates as part of the duties and power of said Board, power "To adopt, revise, and amend from time to time appropriate rules and regulations reasonably necessary for the implementation and effective enforcement, administration and interpretation of the provisions of this Act."

Section 6(f) provided the directive "To establish water quality standards."

The original Act was amended by Chapter 69-919, Laws of Florida, Special Acts of 1969, which was filed in the Office of the Secretary of State on July 9, 1969. The amendments were not substantial. The act was codified in Broward County Code 27-26.

Chapter 71-569, Laws of Florida, Special Acts of 1971, was filed in the Office of the Secretary of State, June 16, 1971. Please note, this Amendment improperly references sections of 65-1338 as sections of 69-919.

Section 1 of this Act deals with the adoption of rules and regulations by the Pollution Control Board, amending Section 6 of the 1969 special Act.

> Section 6 was amended to read as follows:
>
> Pollution Control Board; duties and powers; hearings and procedure; witnesses.
>
> The Board shall have the following duties, functions, powers and responsibilities.
>
> (b) To adopt, revise, and amend from time to time appropriate rules and regulations reasonably necessary for the implementation and effective enforcement, administration and interpretation of the provisions of this act, and to provide for the effective and continuing control and regulation of air and water pollution in the county within the framework of this act, and to provide for appropriate fees to be charged by the county for the services rendered by the county under the provisions of this act. Said rules and regulations shall be subject to the following provisions:

> 1. No such rules and regulations shall be adopted or become effective (including amendments) until after a public hearing has been held by the board. Said hearing to be conducted according to the notice and procedure provisions contained in Subsection (2) of Chapter 403.051, Florida Statutes, as amended, and until the rules and regulations have been filed with the clerk of the board of county commissioners.
>
> 2. The decision of the board to adopt, modify or repeal a rule or regulation shall be based solely on the preponderance of the competent substantial evidence presented at a public hearing.
>
> 3. The board shall have the power and upon application of any affected party shall have the duty to compel the attendance of witnesses and the production of evidence on behalf of the County or any affected party.

The Pollution Control Board was given the power to adopt rules and regulations and the attendant power of enforcement.

Section 7 adds Section 20 to Chapter 65-1338:

> Section 20. Regulations validated.--Any regulations adopted or orders issued by the Broward County Pollution Control Board, and effective in Broward County, Florida, on the effective date of this act are hereby validated as though adopted pursuant to the provisions of this Chapter, and shall continue in effect and by enforced until repealed by the board.

Chapter 72-492, Laws of Florida, Sepcial Acts of 1972, was filed in the Office of the Secretary of State on April 21, 1972. Please note this amendment improperly references sections of Chapter 65-1338 as sections of Chapter 69-919. The amendments were minor.

Chapter 74-444, Laws of Florida, Special Acts of 1974, was filed in the Office of the Secretary of State on June 26, 1974. It basically dealt with the membership of the Board.

The Charter of Broward County was adopted by referendum November 5, 1974, and took effect January 1, 1975. A copy of the pertinent portions of the Charter sections cited below is attached.

Section 8.17(a) of the Charter created as Environmental Quality Control Board; repealed Chapter 65-1338, Laws of Florida, Special Acts of 1965; and provided that:

> The functions, responsibilities, duties and obligations of the Broward County Pollution Control Act as provided in Chapter 65-1338 of the Laws of Florida, and the Special Acts of 1965, as amended, and the functions, responsibilities, duties and obligations vested in the Broward County Pollution Control Board by the various agencies and departments of the State and Federal governments are hereby transferred and vested in the Broward County Environmental Quality Control Board.

Section 8.06 of the Charter dealt with the Effect on Local Laws of the Charter.

> "All existing laws, ordinances, regulations, and resolutions of all units of the former government shall remain operative except where inconsistent or in direct conflict of this Charter."

Apparently, in order to do some housekeeping, Chapter 77-516, Laws of Florida, Special Acts of 1977, was passed by the Florida Legislature and was filed in the Office of the Secretary of State on July 1, 1977.

Section 1 of the Act ratified Section 8.17 of the Broward County Charter and repealed Chapter 65-1338, Laws of Florida, Special Acts of 1965.

Section 4 validated all existing regulations.

> Any and all regulations, ordinances, rules, resolutions and orders issued by or for the Broward County Pollution Control Board or its successor under the Broward County Charter, effective in Broward County, Florida, on the effective date of this Act, are hereby validated and shall continue in force until repealed by the proper governmental body having jurisdiction thereof.

As a result of the powers it was granted by Chapter 65-1338, the Pollution Control Board promulgated a Pollution Control Board Code (hereinafter P.C.B.C.) which codified adopted rules and regulations. There have been a series of regulations, some passed by the Pollution Control Board, and those since 1975 by the E.Q.C.B., amending, changing or expanding said Pollution Control Board Code. These various rules and regulations of the Pollution Control Board/E.Q.C.B. were placed in the Code of Broward County, Chapter 27-41, through 27-152.30 at the discretion of the Broward County Code editor. These rules and regulations have not been adopted or enacted by the Broward County Board of County Commissioners.

24. These rules and regulations are those of the E.Q.C.B., an independent administrative agency, with the specifically authorized power to enact such rules and regulations and the power to enforce them. (T. 602).

25. The rules and regulations of the E.Q.C.B. have recently been completely revised as Chapter 27-1 through Chapter 27-9, the Broward County Environmental Quality Control Act, passed by the E.Q.C.B. on May 28, 1980. Said regulations were effective upon filing in the office of the Clerk of the Board of County Commissioners on June 12, 1980. (Ex. E-2).

26. The E.Q. C.B. regulations set standards for freshwater in Rule 27.5.072. This rule includes the following pertinent standards:

(16) Nitrogen - Total nitrogen as N (from Nitrate, Nitrite, NH_3 and organic, not to exceed 1.5 mg/l.

(19) Oxygen, dissolved - daily average not less than 5 mg/l; single reading never less than 4 mg/l.

(23) Phosphorus (total) - not to exceed 0.2 mg/l.

27. Variances from these standards may be obtained from the E.Q.C.B. (Rules 27-2.13 through 27-2.15; T-600-601). SFWMD has not sought a variance for the project. (T. 602.)

28. On April 20, 1972, the predecessor to DER, the Department of Pollution Control, (DPC), in its Order 404, conditionally approved the Broward local program, pursuant to Section 403.182, Fla. Stat. (Ex. E-1). At page 2, paragraph 5 of that approval, DPC required all regulations of the county to be "at least as stringent" as State rules.

29. On November 7, 1972, the local program was "fully accredited, pursuant to Section 403.182, Florida Statutes." (Ex. E-1, Order 490).

30. By DPC Board Resolution dated March 19, 1974, DPC authorized its Executive Director to execute agreements with local programs to fulfill intent and purposes of Section 403.182, Fla. Stat. (Ex. E-1, Resolution No. 74-35.)

31. Broward County's local program entered into such an agreement on September 17, 1974, with DPC, and with DER on June 18, 1976. (Ex. E-1). The 1976 agreement remains in effect.

32. The agreements both note that they are made in accordance with Section 403.182, Fla. Stat.

33. Under Part II of the 1976 agreement which is still in effect, DER retained jurisdiction over dredge and fill and water pollution matters other than domestic and industrial waste. (Page 2, Part II).

34. Pursuant to this agreement, at paragraph 1.1, fourth sentence:

> "Regulations and local laws enacted by local programs shall be compatible with or stricter or more extensive than those imposed pursuant to Chapter 403, Florida Statutes, and rules and regulations issued thereunder."

35. The agreements and orders of DER (and its predecessor DPC) are consistent with the mandates of Section 403.182, Fla. Stat., in that the local program is authorized to establish stricter regulations, which must be enforced by DER. (T-447, 600).

36. The exception which DER proposes to grant to SFWMD would allow the lowering of water quality standards for disssolved oxygen to,

> "during the months of October through May, the concentration shall not average less than 4.0 mg/l in a 24-hour period and never be less than 3.0 mg/l. During the months of June through September, the concentration shall not average less than 3.0 mg./l in a 24-hour period and never be less than 1.0 mg/l."

37. The proposed exception clearly violates Broward County's more stringent dissolved oxygen standard of 5.0 mg/l. (Ex. E-2).

38. Water from the proposed project would be discharged into Broward County, (T. 33, 124) and dredging and filling and construction would take place in Broward County. (See findings of fact 4 and 8).

39. Water from the proposed project will Violate the Broward County standard for nitrogen. (Testimony of William A. Pitt, Jr., T. 410-411). A variance from the County is thus required for the nitrogen standard. (T. 411). (The nitrogen standard of E.Q.C.B. is set forth above in finding of fact 26.).

40. Water from the proposed project will violate county phosphorous standards. (T. 411-412).

41. SFWMD had previous experience with local program water quality standards and knew that DER must enforce more stringent local water quality standards. (T. 50, 64).

42. DER staff understands that it cannot grant an exception from Broward County regulations. (T. 446-447, T. 629; DER letter of June 24, 1980, amending the "Intent to Issue").

43. Broward County has a separate Division, the Water Management Division of the Department of Transportation, which issues water resource permits. (T. 559). However, SFWMD projects are exempt from this permitting process. (T. 559). This Division does not involve itself with water quality standards, which is handled by the E.Q.C.B. T. 559-561). A project the size and magnitude of this project has never been reviewed by that Division (T. 589). The head of the Water Management Division reiterated that his division does not concern itself with water quality standards, (T. 570-571) which is handled by the E.Q.B.C. (T. 589).

44. The standards of that Division deal with design of highway and paving drainage and engineering aspects of water management. See various pamphlets introduced as Composite Exhibit I-1.

45. The petitioner Broward County pays for the operation of the E.Q.C.B. (budget) and appoints most of its members. (T. 602, 926).

C. Water Quality Issues Not Covered Under Part B.

46. SFWMD has requested an exception to the DER dissolved oxygen standard under the provisions of Rule 17-3.031, F.A.C., as amended October 2, 1980. Under that rule exceptions to standards can be granted where it is "affirmatively demonstrated" that the exception is required.

47. Pursuant to Rule 17-3.061, F.A.C., as amended 10-2-80, a dissolved oxygen standard can be reduced to background if, after a public hearing, it is established that background levels should be the criteria, or the level may be established by exception under Rule 17-3.031.

48. No hearing contemplated by Rule 17-3.061, F.A.C. has been held. Thus, the request to lower the standard must be considered under Rule 17-3.031, F.A.C.

49. Land use intensification is expected upon completion of the proposed project, which means more cattle per acre and higher crop yield. (T. 151-152). This will increase nutrients in the water and lower the amount of disssolved oxygen (T. 406, 414, 857). See also DER's "Intent to Issue", at page 2, the last two sentences of the first paragraph, where DER states that "the proposed project may result in the degradation of water quality by the deepening of the existing canal and by the introduction of excessive nutrients through feeder canals."

50. The water in the canal will be of lower quality than the natural sheet flow water. (T. 733). Deepening the canal means increasing the quantity of water with low or zero amounts of dissolved oxygen. (T. 753, 761; Depos. of Fred Davis, Page 44).

51. Neither DER nor SFWMD established what "background" water quality was for any criteria.

52. Nothing in the statutes or regulations relied upon authorizes DER to permit or grant an exception which would lower existing water quality.

53. The proposed project would lower existing water quality below background. (T. 857, 947, 957, 959).

54. The water quality expert for SFWMD testified that it was "impossible to determine" whether the water in the project could meet the proposed standards in the "exception" because the proposed criteria calls for averages, and there are no averages to be applied. (Deposition of Frederick E. Davis, page 28).

55. Neither DER nor SFWMD have affirmatively demonstrated that the dissolved oxygen standard proposed in the so-called exception is proper, or that it could be met by SFWMD.

56. The preponderance of the substantial competent evidence demonstrates that the proposed project will lower water quality, including dissolved oxygen, in the canal system, increase nutrients, and deposit this lowered quality water into the public waters of Broward County.

57. The preponderance of the substantial, competent evidence does not demonstrate that background dissolved oxygen levels average less than 5 mg/l on a year round basis. SFWMD chemist, James F. Milleson testified that his dissolved oxygen studies showed levels between 5.0 and 8.0 milligrams per liter (T. 377), which means an average higher thatn 5.0 mg/l. However, Mr. Davis testified to test results in Broward County of levels between 2.0 and 15 mg/l. No average was given. (Depos. p. 16). Thus, the evidence demonstrates that the "exception" would set a standard below background. (See finding 53.).

D. Local Approval under Section 253.124, Florida Statutes

58. Section 253.124, Fla. Stat., and its companion rule 1704.29(8), F.A.C., require local approval by the County Commission for fill projects in navigable (sovereignty) bodies of water, where the fill extends uplandsinto the water.

59. The applicant, SFWMD, has never contested DER jurisdiction under Chapter 253, Fla. Stat., to require a fill permit under Section 253.124, Fla. Stat., except for the issue of whether its proposed project (S. 239) constituted "extension of existing lands." See "Stipulation between DER and SFWMD, attached to petition in case No. 80-1048, and part of DER files, admitted as Ex. D-1 . Landowner Intervenors raised this issue at a late date (sovereignty lands), and the issue was struck from the pleadings by this Hearing Officer's "Order on Motion to Strike" dated November 12, 1980. Thus, no testimony was allowed on navigability or ownership issues, and the waterways in questions were assumed to be navigable waters of the State pursuant to Section 253.12 and 253.124, Fla. Stat.

60. Between November 15, 1978, when the permit was applied for and April 3, 1980, it was the continued position of the Department of Environmental Regulation that local approval for this project was needed pursuant to Section 253.124, Fla. Stat. (Request for Admissions, Ex. P-2, para. 2).

61. The DER requested Broward County, in writing, to review this project, pursuant to Section 253.124, Fla. Stat. (Answers to Request for Admission, Ex. P-2, Para. 5.)

62. The Broward County Commission held a public hearing on this project and refused to give approval to the project. (Request for Admission, Ex. P-2, para. 6). The vote of the County Commission was unanimous in opposition to the project. (Testimony of County Commission Chairman Ann Kolb (T. 928); (see also Ex. P-3, minutes of Broward County Commission meeting of May 22, 1979).

63. The applicant, SFWMD, made a presentation at the County Commission meeting and did not protest the County's authority to review the project. (T. 920).

64. Between April 3, 1980 and May 20, 1980, no changes were made to the project and no new engineering drawings or plans were submitted, to the DER. (Answers to Request for Admissions, Ex. P-2, para. 7).

65. The preponderance of the competent substantial evidence demonstrates that the past policy of the DER has been to require local approval under Section 253.124, Fla. Stat., for projects like the project at issue here, specifically, construction of Structure 239. Mr. James Brindell, former General Counsel of DER, until 1967, and from 1977 to 1979, Director of that Department's Division of Environmental Permitting, (deposition, page 5) testified that his review of this project indicated

from his experience at the Department, that such a project would require local approval "because it would constitute an extension of the land through the placement of fill material in the water." (p. 13 of deposition). He testified that there was no policy of the Department distinguishing between the actual use made of fill. (P. 9 of deposition). In addition, Mr. Ross McWilliams, who was the Section Administrator in the standard dredge and fill section of the Bureau of Permitting at the time that this application was reviewed (p. 5 of deposition) testified that he had reviewed the drawing submitted with the application, including all updated drawings, and agreed based upon his understanding of Department policy, that local approval was needed for this project under Chapter 253. (Pps. 14-15 of deposition). He said that his opinion was based upon long term policy of the agency. (T. 16). He testified that the issue was not the intent, but the result of the fill and whether it, in fact, extended land. (T. 25-26). Mrs. Helen Setchfield testified that the Department's predecessor in these type cases, the Board of Trustees of the Internal Improvement Trust Fund, had a "varied history" on local approval. (T. 437). She said "sometimes we required it and sometimes we didn't, depending on a number of factors." (T. 437). Mrs. Setchfield testified that she did not consider this project, when she looked at it, to allow driving upon it. (T. 439). She agreed that the DER employee, (Forrest Fields) based on the way he understood the Department's policy, thought that this project required local approval and in fact, required it. (T. 439-440). She said that the Governor and Cabinet, sitting as a Board of Trustees did not have a consistent position on local approval for such things as spillways. (T. 441-442). She admitted that there are no regulations of the Department which set out any basis to determine what is an extension of land requiring local approval (T. 443) and admitted that field representatives of the Department in different regions of the State make differenet interpretations of the regulations or policies of the Department. (T. 443-444). She added that "two people in Tallahassee could understand the policy differently, yes." (T. 444).

Thus, the preponderance of the competent substantial evidence establishes that the long time policy of the Department was to require local approval for projects such as that before this Hearing Officer. The DER testimony on this issue did not affirmatively contradict the other competent testimony on this issue.

CONCLUSIONS OF LAW

A. Standing

In order for Petitioner, Broward County, to have standing pursuant to Section 120.57, Fla. Stat., it must be shown that the proposed action of the State agency substantially affects the Petitioner. *Couch Construction Co., Inc. v. Dept. of Transportation*, 361 So. 2d 184 (Fla. 1st DCA 1978). Department of Environmental Regulation Rule 17-1.62, F.A.C., authorizes petitions for administrative hearings by substantially affected persons. The evidence shows that Broward County has already been damaged and is in immediate danger of suffering damage to its natural resources and to its legal authority.

Structure 239, along with more than three miles of the proposed canal will be in Broward County. Dredging and filling will take place in Broward County waters. Water dumped into Broward County by the project will be dramatically changed in the duration of flow and the depth of short term flooding. Fish and wildlife in Broward County will be detrimentally affected by the proposed project. The County was specifically asked by the DER to hold a hearing for local review pursuant to Section 253.124, Fla. Stat. Following a unanimous disapproval by the County Commission, DER has elected to disregard the County's decision. Finally, the project will create water quality problems in the length of the canal to be constructed in Broward County and will bring poor quality water from Hendry County, all of which will violate water quality standards established by the approved Broward County local pollution control program, the Environmental Quality Control Board. This Board is funded by the Broward County Commission for the specific purpose of protecting the County air and water quality. Clearly, Broward County has already been forced to spend public funds holding hearings in this matter, and is in immediate danger of being damaged by the proposed project. It has standing to maintain its administrative action, including all allegations.

It is noted that the parties have stipulated to standing in this case, and no objection has been raised to the standing of any party. Petitioner clearly has standing in this case pursuant to Section 120.57, Fla. Stat.

B. Requirement for compliance with standards of local pollution control program.

Pursuant to Section 403.182(6), Fla. Stat., the Department of Environmental Regulation must enforce stricter rules of an approved local pollution control program. The duty is not upon the local program, in this case, Broward County, but is upon DER to effectuate.

DER has retained jurisdiction over dredge and fill permitting and the water quality aspects of dredge and fill projects and therefore must enforce the strict rules of the county.

Certain landholder intervenors attempted to make a point at the hearing that Broward County does not always enforce its dissolved oxygen standards. However, testimony on that issue is irrelevant and immaterial in this case where it is DER which is required to enforce the more stringent standard, and not the local program.

It was further argued by counsel for landowner/intervenors that the regulations of the Environmental Quality Control Board of Broward County are not effective since the county local program has not entered into a new agreement with DER since 1976. This argument is, of course, ludicrous. The agreement does not mention any ending date to the agreement unless there is a decision to break the contract. That has not been done. Standards, pursuant to the various agreements and orders entered into the record, can be changed, so long as the county rules remain the same as or more stringent than DER regulations. The only requirement is that a change in a local program rule, if more strict or stringent than the previous rule, shall not apply to a source operating at the time of such change in conformance with the currently valid permit issued by DER. See 403.182(7), Fla. Stat.

The competent substantial evidence demonstrates that the water from the proposed project in Broward County will violate nitrogen, phosphorus, and dissolved oxygen standards of the Broward local program. The applicant, however, may, if it can demonstrate valid reason, obtain a variance from the local program from these standards.

In making this decision this Hearing Officer was mindful of the "reasonable mixing zone" requirement for testing of water quality found at Section 27-5.079(2), Rules of the E.Q.C.B. (Exhibit E-2). However, there was no testimony from the applicant or anyone else that reasonable mixing would be of any benefit for the nutrients or dissolved oxygen which are at the center of this controversy. The reasonable mixing zone allows for dilution, which would be of absolutely no benefit for the three criteria which would be violated by the proposed project.

Since the proposed project will violate the Broward County local program water quality standards as above-mentioned, and since the DER must enforce the local standards, DER cannot grant its permit until after the Broward County local program grants variances from its standards. (Assuming, of course, that E.Q.C.B. would grant such variances, which is a decision which must be made by that Board upon the facts presented to it.) Thus, as a condition precedent to the issuance of any permits, the applicant must obtain variances from the more stringent local standards. If and when that occurs, DER would be authorized to issue its permits in compliance with any variances given by the local program. Until variances from the local program standards are obtained, the permit application must, as a matter of law, be denied.

C. Water quality permits.

The applicant for a permit from DER must "affirmatively" provide DER with "reasonable assurance" that the proposed activity will not cause pollution in contravention of Department standards, rules and regulations. Section 17-4.07(1), F.A.C. Pursuant to Rule 17-1.59, F.A.C., the burden of establishing entitlement to a license or exception remains with the applicant.

In this case, the applicant, SFWMD, did not affirmatively demonstrate that its project would not violate water quality standards. In fact, the uncontradicted evidence shows that the project would violate both DER and County standards.

With respect to dissolved oxygen, failure to meet standards is the very reason that the applicant applied for an exception. Pursuant to Rule 17-3.031, F.A.C., a Petitioner or the Department must affirmatively demonstrate that the criteria which is proposed in the exception request can be shown to be required by a preponderance of the substantial competent evidence. However, the lowest that the water quality standard can be lowered is to the level of existing water quality, or "background". Rule 17-3.031(1), F.A.C. In this case, the competent substantial evidence demonstrates that the exception proposed by DER in its Notice of Intent is below background, and would therefore allow increased pollution. The Department is not authorized to grant exceptions which would result in lowered water quality. It is further not authorized to grant exceptions which would allow water quality below background. The purpose of Chapter 403, Fla. Stat., is to conserve, protect, maintain and improve water quality. Section 403.021(2), Fla. Stat. Nowhere has the legislature authorized DER to degrade water quality.

Furthermore, neither the applicant nor DER established what the average dissolved oxygen levels were in the background. Their proposed new criteria under the exception would be measured by an average, and no average was decided upon for the waters in the existing waterway.

Moreover, as above stated, the testimony of the DER expert was to the effect that the proposed project would result in lower dissolved oxygen quality and more nutrients. (NOTE: As to dissolved oxygen, background levels become the criteria if, after public notice and hearing, those background levels are determined to be below the State standard of 5 milligrams per liter. See Rule 17-3.061(3), F.A.C.)

Neither the applicant nor DER has affirmatively demonstrated by a preponderance of the competent substantial evidence that the water quality standards of either the Department or the Broward County local program will be met by the project. Moreover, neither the applicant nor DER is entitled to the adoption of an exception to the standards for dissolved oxygen because the proposed new standard and the proposed project itself would result in water quality lower than that existing as background. For these reasons both the proposed permit and the proposed exception must be denied.

D. Effect of denial of approval by Broward County Commission pursuant to Section 253.124, Fla. Stat.

Pursuant to Section 253.124, Fla. Stat. the party who intends to fill navigable waters of the state by pumping sand, rock or earth from such waters or by any other means so as to add to or extend existing lands located in the unincorporated area of the County must apply to the Board of County Commissioners for a permit authorizing such construction. It is undisputed that in this case, the application of the SFWMD was submitted to the County and, by unanimous vote, the County Commissioners voted to deny that permit.

The issue of whether the water in this area is navigable or not was not raised properly in this case and is therefore not considered. The issue which was hotly contested was whether the proposed structure 239 to be constructed in the canal in Broward County extended existing lands so as to come within this provision of the statute. The preponderance of the competent substantial evidence demonstrates that the placing of thousands of cubic yards of dirt fill and the placement of the concrete structure which can be driven upon across the canal certainly qualifies for extension of land and is therefore within the provision of Section 253.124, Fla. Stat.

Moreover, according to the preponderance of competent substantial evidence, projects such as this have, according to long standing policy of the Department of Environmental Regulation, been required to obtain local approval. In fact, in this case, the DER officials in charge of the application did so interpret this project and did require local approval by Broward County Commissioners.

What DER attempts to do in this proceeding is to change its long term policy and, its long standing policy with respect to this specific case. The courts give great weight to the long standing statutory interpretations made by officials charged with administration of the statutes. *Austin v. Austin*, 350 So.2d 102, 104 (Fla. 1st DCA 1977). State agencies are not entitled to change long term policy and interpretation of statutes by suddenly announcing that they no longer believe they are legally authorized to adopt that policy or make that interpretation. The DER must stand by its long term policy, including the policy it adopted in this case, unless it can demonstrate in the rulemaking process that its policy should be changed. See *Walker v. State Department of Transportation*, 366 So. 2d 96, 99 (Fla. 1st DCA 1979); *White Advertising International v. State Department of Transportation*, 368 So.2d 411 (Fla. 1st DCA 1979).

In addition, the preponderance of the competent substantial evidence demonstrated that the proposed project would interfere with the conservation of fish and wildlife in Broward County to such an extent as to be contrary to the public interest. Pursuant to Section 253.124(2), Fla. Stat., the Broward County Commission was entitled to review the project with respect to the issue of whether it would interfere with the conservation of fish and wildlife or other natural resources to such an extent as to be contrary to the public interest, and was also authorized to "consider any other factors affecting the public interest."

Among those factors should be considered the fact that this project will cost in excess of $14 million of taxpayers money, with large annual expenditures for maintenance and upkeep. The proposed project will benefit only 4% of the land that is currently allegedly flooded, and will not stop flooding or over drainage problems. Moreover, the competent substantial evidence indicated that this proposed project will cause over drainage to some of the landowners' land such as that of Mr. Bubba Mills. In addition, the uncontradicted evidence demonstrates that the cattle ranchers in the area easily resolve any flooding problems at the present time by moving their cattle to higher ground. The spending of more than $14 million plus maintenance costs to relieve a situation that is relieved by moving cattle, is certainly contrary to the public interest.

For the above reasons it is hereby found, as a conclusion of law, that the Broward County Commission was and is entitled, pursuant to Section 253.124, Fla. Stat. to review the proposed project and to either grant or deny its permission to carry out the project. The denial of a permit by the County prohibits DER from acting further upon the permit application. As a matter of law the DER cannot grant the permit following the denial by the Broward County Commissioners.

Broward County operates under a county charter and, it goes without saying that the policy of Florida is to authorize "home rule" in the various counties which elect to adopt a charter. Article VIII, Section 6(e), Florida Constitution (1968). A county is entitled and required to protect its natural resources and the public health and welfare of its people. Nothing in the State regulatory scheme takes away this right of the county. The Department of Environmental Regulation, after recognizing the county's interest, cannot, for political or other reasons, simply change its mind after the county's elected officials have acted in accordance with their duty and authority. The County Commission has denied the permit request under Section 253.124, Fla. Stat., and the Department of Environmental Regulation cannot avoid the county decision and therefore cannot grant the dredge and fill permit requested.

RECOMMENDATION

For all of the above reasons the permit and exception to water quality standards requested by the applicant, South Florida Water Management District, must be denied by the Department of Environmental Regulation.

Respectfully submitted,

OERTEL & LARAMORE, P. A.
646 Lewis State Bank Building
Tallahassee, FL 32301
(904)222-8396

Attorneys for Petitioner,
BROWARD COUNTY

Kenneth F. Hoffman
KENNETH F. HOFFMAN

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing Proposed Recommended Order of Petitioner Broward County has been furnished by U. S. mail this 18th day of March, 1981 to: PHILLIP S. PARSONS, ESQ., P. O. Box 1548, Tallahassee, FL 32302; RANDALL E. DENKER, Attorney, Office of General Counsel, Department of Environmental Regulation, 2600 Blairstone Road, Tallahassee, FL 32301; WILLIAM E. STOCKMAN, ESQ. 301 First Federal Building, 2335 East Atlantic Boulevard, Pompano Beach, FL; TIMOTHY KEYSER, ESQ., P. O. Box 92, Interlachen, FL 32048; RICK L. CULLEN, ESQ., P. O. Box 27, Hollywood, FL 33022; STEPHEN A. WALKER, ESQ., South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33402.

Kenneth F. Hoffman

July 10, 1978

Mr. James Garland
Chief, Engineering Division
Jacksonville District
Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32201

Dear Mr. Garland:

SAI No. 78-1316E, Hendry County,
Corps of Engineers, (Hendry County Flood Control)

Your proposal to construct the Hendry County Flood Control Project has been reviewed by this agency. Your project involves excavation of approximately 5.4 million cubic yards of material from submerged lands of waters of the state to widen, deepen, and extend approximately 36.4 miles of drainage canals in eastern Hendry County, Florida. Spoil would be placed to form levees adjacent to these canals. In addition, a water supply phase of your project involves construction of 10.5 miles of new or extended canals as well as ancillary pumps and structures. Moreover, land owners would be required to connect private drainage canals to your works. The purpose of these activities is to enhance drainage of agricultural lands and to increase the rate of removal of flood waters in a 261 square mile segment of Hendry County.

An intradepartmental review of your project has produced a mixed analysis of the impacts of your project. The proposed southerly extension of canal C-139 into Conservation Area 3-A will require a Department of Environmental Regulation dredge and fill permit pursuant to Chapter 403, Florida Statutes, and Subsection 17-4.28(2), Florida Administrative Code. Bridges and culverts constructed pursuant to your project will require Department of Environmental Regulation permits, and permits pursuant to Subsection 403.088(3), Florida Statutes, will be required for connection of the private drainage canals to your works. In addition to the dredge and fill permits which will be required, your project will have certain long-term adverse impacts on both water quality and on biological resources.

Your project is intended to remove floodwaters and to enhance drainage in a agricultural area. However, it is possible that, in achieving these goals, your project will have adverse effects on the water quality and on the biological resources of Conservation Area 3-A. Drainage water from agricultural areas is a documented source of water quality degradation, (See papers of Central and Southern Florida Flood Control District, 1972; Baldwin, 1975; Hill, 1976; and Morris, 1976): nutrients from farms contribute to eutrophication, bacterial pollution from cattle operations prevents watercontact use and limit water supply uses, and biocides from insect and weed control programs are both toxic to and accumulate in organisms. Indeed, the State of Florida has had considerable negative experience with similar impacts of other flood control projects in the area of the South Florida Water Management District. As you know, both the State and the Federal Governments are involved in an expensive study to determine whether the Kissimmee River, which was channelized to remove floodwaters and to enhance drainage, can be restored to mimic a natural river. The possible adverse impacts of your project on both Conservation Area 3-A and the Everglades National Park appear to warrant careful evaluation of the long term impacts of these modifications of the drainage system.

The Department of Environmental Regulation appreciates the opportunity to comment on this project.

Sincerely,

WRM

W. Ross McWilliams
Section Administrator
Standard Permitting Section

February 19, 1979

Mr. Lee M. Brown
South Florida Water Management
District
Engineering Design Division
Post Office Box "V"
West Palm Beach, Florida 33402

Dear Mr. Brown:

Re: DER No. 26-15052, Hendry & Broward Counties, South Florida Water Management District

Please refer to our telephone conversations of February 16, 1979, and to the Department of Environmental Regulation completeness summary of December 12, 1978, items 6 and 21A.

First, the drawings which you supplied on February 7, 1979, (your February 5, 1979 letter) were sufficient to define the scope of your project; comments have been requested pursuant to paragraph 17-4.28(11)(c), Florida Administrative Code. These comments will be due on approximately March 21, 1979. Second, on page 2/11 of your drawings, you indicated that approximately 5500 cubic yards of fill material will be placed waterward of ordinary high water. I presume that this fill is associated with structures S-243 and S-239. Pursuant to Section 253.124, Florida Statutes, approval of this filling by resolution of the local government is required. To do this, I will, upon receipt of the Department of Environmental Regulation field report, summarize and send this to the Hendry County Commission. The commission will have to consider this report and, by vote, adopt a resolution approving the project. (I will send you a sample resolution.)

Third, the department's attorneys have advised me that the South Florida Water Management District is not an agency of the state; a $200 fee will be required. Fourth, as we discussed, the water quality statements in the EIS and the GDM do not provide reasonable assurances that water quality standards will not be violated; no data are presented to support these statements. On page 65 of the GDM, referencies "q" and "r" are cited; however, I have not received these items. The procedure to provide "reasonable assurance" for this project must address the following parameters: nitrogen, phosphorous, biocides, suspended solids, and organics. What are the existing concentrations of these parameters in the project? What dissolved oxygen regime is found here? What are the predicted post-project concentrations of the subject parameters? What are the probabilities of long-term changes in these parameters associated with private connections to works of the district? What techniques of retention, detention, and assimilation are typically required before authorizing such private connections?

Please contact me at 904/488-0130 if you have any questions.

Sincerely,

F 19 Feb 79

Forrest S. Fields
Environmental Specialist
Standard Permitting Section

April 3, 1980

Mrs. Evelyn Jackman
Route 1, Box 108
Clewiston, Florida 33440

Dear Mrs. Jackman:

Governor Graham has asked that I respond to your letter of March 17, 1980 regarding the proposed improvements to Canal C-139 in Hendry and Broward Counties by the South Florida Water Management District.

Pursuant to Section 253.124(3), Florida Statutes, approval must be obtained from the county commissioners before we can complete the processing of a permit application for fill in navigable waters. Approval has not been received from Broward County and there is fill proposed for the Broward County portion of the project.

APR
DIV. EN
PE

In addition, as levels of dissolved oxygen are anticipated to fall below standards, the South Florida Water Management District has applied for an exception from State Water Quality Standards for the project. At the present time, information requested from the water management district on August 20, 1979 has not been received and the application for exception is also incomplete.

The Department of Environmental Regulation is sympathetic to the problems outlined in your letter and for that reason the Department has made this project part of its public works package given each year to Congress. We still support this as a public works project and for that reason we are attempting to work out the permitting problems as expeditiously as possible.

Please let me know if I can provide additional information.

Sincerely,

/s/Victoria J. Tschinkel
Victoria J. Tschinkel
Assistant Secretary

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

TO: File

FROM: Forrest Fields F

DATE: March 28, 1979

SUBJECT: DER No. 26-15062, Hendry and Broward Counties
South Florida Water Management District
(Hendry County Flood Control Project)

On March 21, 1979, a meeting to discuss the referenced application for a DER dredge and fill permit was held in the Secretary's office. Messrs. Maloy, Dineen, Brown, and Davis represented SFWMD. Ms. Tschinkel, and Messrs. Varn, Vergara, Littlejohn, McWilliams, and Fields represented DER. The status of the application was discussed. Two items, local approval, per Section 253.124, F.S., and reasonable assurance, per subsection 17-4.28(B), F.A.C., are lacking for compliance with the statutory and regulatory criteria for issuance of a permit. The agency is asserting "253" jurisdiction because the proposed canal is a waterway, ca. [illegible]5 miles long, which is navigable in fact. This follows the reasoning of the Jefferson National Bank case. The 253 issue was conceded to be an administrative procedure - no substantive issues under 253 appear to affect this application. The potential drainage of the Hendry County watershed and the potential increase in duration and magnitude of flooding in WCA 3A are not deemed to be 253 issues.

Consideration of reasonable assurance began at the March 15, 1979, conversation among Messrs. Brown, Davis, and Fields. According to the SFWMD, widespread and frequent violations of the Class III water quality standard for dissolved oxygen, as contained in Ch. 17-3, F.A.C., occur throughout the Evergaldes, in the canals, agricultural areas, Lake Okeechobee, and the conservation areas. The existing borrow canals follow this pattern. The SFWMD alleges that this condition is natural background. They agree that it is probable that any existing DO stresses existing in the borrow canal will be exacerbated in the proposed [illegible].

However, both the former and present editions of Ch. 17-3, F.A.C., allow for exceptions for natural background. The SFWMD will review these rules to determine which regulatory approach will be taken. In addition, the SFWMD will supply to DER data from the "benchmark" station in the L-28 canal and at Everglades National Park to demonstrate lower background concentrations of DO. Furthermore, the SFWMD will apply, per Ch. 403,087, F.S., for a temporary operating permit for the completed structure. Conditions governing private connections and incorporating BMPs may be included in the TOP.

In summary, the following actions were agreed:

1) The Department of Environmental Regulation will send letters to the Hendry and the Broward County Commissions requesting local approval for the filling associated with the two structures;

2) The South Florida Water Management District will provide criteria used to determine the "benchmark" status of the L-28 and the Everglades National Park stations;

3) The South Florida Water Management District will provide data to support their allegation that natural background dissolved oxygen in the area does not conform to the minium standards of Chapter 17-3, Florida Administrative Code;

4) The South Florida Water Management District will propose alternative standards;

5) If a permit is issued, the South Florida Water Management District will deploy turbidity control devices during construction of C-139;

6) If a permit is issued, the South Florida Water Management District will apply for a Temporary Operating Permit (TOP) for C-139, and this TOP may include criteria for Best Management Practices and criteria for retention/detention/treatment of private discharges before connecting these to C-139.

TO: E. D. Vergara

FROM: Steve Fox

DATE: October 16, 1979

SUBJECT: DER File No. 06&26-15062, Broward & Hendry Counties, South Florida Water Management District (C-139, Hendry County Project)

This is in response to your request of October 2, 1979, for a comparison between the referenced application and the "hump removals" in the Miami and North New River Canals. The two projects are similar in that both would expand existing canals which have been constructed in the Everglades. Neither of the existing canals meets the criteria for dissolved oxygen in the State Water Quality Standards. The natural condition of the Everglades (i.e., slow flow of water, high rate of primary production, and organic soils), depth and hydraulic character of the canals, and quantity and quality of agricultural drainage discharged into these canals combine to depress the dissolved oxygen regime.

However, from these general similarities, significant specific differences distinguish the C-139 project from the "hump removal." Both the Miami and the North New River Canals are of known volume and grade. The authorized work in the Miami Canal will eliminate a "hump", of higher elevation of the submerged bottom, between Lake Okeechobee and the East Coast. This work will provide a continous design cross-sectional area and gradient. Moreover, the hump removal will not be associated with increased removal of flood waters. No land use changes, with concomitant increases in agricultural discharges, would follow from this project. After the project is constructed, and turbidity settles, there should be no demonstrable difference between the pre- and post-project water quality.

In comparison, C-139 does not presently exist as a designed canal; rather, it is a series of interconnected borrow areas parallel to and excavated for the construction of levees L-1 through L-4. The proposed C-139 project would involve significant increases in gradient, depth, and cross-sectional area of the existing ditch. Deeper, more stagnant waters are known to exhibit increased concentrations of organic compounds, with concomitant reduction in the concentration of dissolved oxygen. Moreover, an increased rate of withdrawal of flood waters could allow more intensive land use in the watershed. Both cattle and farming operations are demonstrated to be associated with water quality degradation in the Kissimmee River. There is a potential, of uncertain magnitude, for this impact here.

The staff believes that the applicant for the Hendry County project may be able to provide the assurances required by our rules. First, using the design hydrological conditions for C-139, the post-project water quality regime should be modifed to predict both DO and BOD. The predictive model should include the concentrations and loadings of nutrients and organics from the watershed. Second, the predicted water quality regime should be compared with the existing, pre-project conditions. Only upon demonstration that no significant differences exist between pre-project and post-project conditions would the project conform to the regulatory criteria for the issuance of a permit. The South Florida Water Management District has not provided this analysis.

In conclusion, the staff feels that there are real differences between the Hendry County Project and the hump removal; the similarities are, mostly, superficial. The controversy surrounding the Hendry County project is not a concern to our staff.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

May 20, 1980

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen A. Walker
South Florida Water Management
  District
Post Office Box V
West Palm Beach, Florida 33402

Dear Mr. Walker:

Request for Exception
"Hendry County Project"
File No. VE-26-13

The Department of Environmental Regulation hereby gives notice of its intent to grant an exception from criteria in response to your petition dated July 23, 1979, and amended April 8, 1980. The petition requested pursuant to Section 17-3.031, Florida Administrative Code, an exception to the criteria for dissolved oxygen established in Subsection 17-3.121(14), Florida Administrative Code. Further, the petitioner requested we find that:

1. The water body(ies) affected are Water Conservation Area 3A (WCA-3A) and the Hendry County Canal System (L-1, L-2, L-3, and L-3 extended borrow canals).

2. The time period for which the exception is needed is indefinite, but can be expected to continue for the life of the canals and their usage as conveyances of water to WCA-3A.

3. The amount of dissolved oxygen in waters of the state found in WCA-3A is due to natural causes, i.e., WCA-3A is a natural wetland habitat.

4. The amount of dissolved oxygen in waters of the state found in Hendry County System is due to man induced causes which cannot be controlled or abated with technology or management practices including zero discharge; that is, the conditions present in the canals are not the result of pollutant discharge but are the result of physical characteristics and hydraulic dynamics common to all canal systems in South Florida.

The petitioner believes a more appropriate standard for these water bodies, WCA-3A and Hendry County System is:

> Dissolved Oxygen - during any 24-hour cycle the dissolved oxygen concentration within the photic zone shall exceed 2.0 mg/l, except during the extreme low point when values shall not be less than 1.0 mg/l for more than two consecutive hours.

In support of this proposed standard, petitioner has submitted evidence to demonstrate that:

1. The proposed standard will not impair the designated use of the waters, Class III - Recreation-Propogation and Management of Fish and Wildlife-Surface Waters;

2. The biota are adapted to the background;

3. There is no evidence of ecological stress; and,

4. There are no anticipated adverse impacts.

The Department, after reviewing the data presented by the petitioner, finds that:

1. Existing canals (L-1, L-2, L-3, and L-3 extended borrow canal) are proposed to become a single canal designated as C-139;

2. A slide gated culvert (S243) and a gated spillway (S239) are proposed to be constructed on C-139 for the purpose of aiding in the conveyance of flood waters from eastern Hendry County to WCA-3A; and,

3. Only a portion of WCA-3A will receive these additional waters, most particularly that portion bordered by the Miami Canal on the east, L-28 on the west, L-4 on the north, and the Everglades Parkway on the south.

The Department intends to grant the exception from criteria for C-139, between S243 and WCA-3A, and for that portion of WCA-3A described in paragraph 3, above. The Department, based on the data submitted by the petitioner, intends to establish the criteria for these areas as follows:

> Dissolved Oxygen - during the months of October through May, the concentration shall not average less than 4.0 mg/l in a 24-hour period and never be less than 3.0 mg/l. During the months of June through September, the concentration shall not average less than 3.0 mg/l in a 24-hour period and never be less than 1.0 mg/l.

The Department does not intend to grant an exception for any other waters of the state which may be associated with the C-139 and the WCA-3A. Further, the granting of the exception is contingent upon the issuance of a dredge and fill permit to construct C-139 and S239. Should such permit be denied, the exception shall also be denied.

Should you wish to dispute a material fact of this proposed agency action, a petition for a formal hearing shall be filed in accordance with the provisions of Section 120.57(1), Florida Statutes. This petition shall comply with the requirements of Section 28-5.201, Florida Administrative Code (copy enclosed), and be filed with the Office of General Counsel, Department of Environmental Regulation, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301. Petitions must be filed within fourteen (14) days of receipt of this notice and be in accordance with the above provisions or they will not be accepted by the Department. Pursuant to Section 17-1.25, Florida Administrative Code, "filing" is complete upon receipt, during normal business hours, by the main office of the Department in Tallahassee, Florida, where the Office of General Counsel is located.

If no petition for a formal hearing is received, the Department shall give notice and conduct an informal hearing in accordance with the requirements of Section 17-3.051, Florida Administrative Code, for the purpose of taking testimony, both oral and written, on the merits of the proposed [illegible] action. Such hearing will not be noticed or held [illegible] opportunity for a formal hearing has been waived

Sincerely,

Stephen J. Fox, Director
Division of Environmental
Permitting

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the matter of: Application for permit	) File No. 26-15062, Hendry and) Broward Counties) South Florida Water Management) District

South Florida Water Management District
Post Office Box V
West Palm Beach, Florida 33402

Attention: Stephen A. Walker

INTENT TO ISSUE

The Division of Environmental Permitting hereby gives notice of its intent to issue, and proposed order of issuance for, the application specified above pursuant to Chapters 253 and 403, Florida Statutes, and Public Law 92-500. This intent to issue is contingent upon the applicant being granted an exception from the criteria for dissolved oxygen, for Class III waters, pursuant to Section 17-3.031, Florida Administrative Code. The Division is issuing this intent to issue for the reasons stated below.

The applicant, South Florida Water Management District, applied on November 15, 1978 for a permit to construct Canal 139 and Structures 239 and 243 as part of the Hendry County Flood Control Project.

The Department has jurisdiction under Chapters 253 and 403, Florida Statutes, and Public Law 92-500, as amended, for permitting dredge and fill activities to be conducted in waters of the State. Existing borrow canals (L-1, L-2, L-3, and L-3 extended) are proposed to be widened and deepened creating a proposed new Canal 139. The existing canals are and the proposed canal will be navigable in fact, are and will be connected through a series of navigable canals to Lake Okeechobee, a natural body of water, and are themselves located in the Everglades. Therefore, the proposed project is located in waters of the State over which the Department has dredge and fill jurisdiction pursuant to Subsections 17-4.28(2) and 17-4.29(1), Florida Administrative Code. The project is not exempt from permitting procedures. The applicant was officially notified that a dredge and fill permit would be required for the project.

The field appraisal of the project site for the evaluation of the proposed project was submitted by Department staff on March 5, 1979 and referred to a previously submitted memorandum of June 9, 1978. The memorandum of June 9, 1978 was submitted as an appraisal of Application No. 26-9976 which was an application for essentially the same project. The memorandum indicated that the proposed Canal 139 would be excavated from an existing borrow canal originally excavated to construct a series of levees. The levees were designed to eliminate the west to east drainage of surface waters from entering the agricultural lands developed in the Everglades, south of Lake Okeechobee. During the wet season the levee impounds water over extensive areas west of the levee causing socioeconomic problems, primarily to some agricultural interests. The levee/canal system discharges into Water Conservation Area 3-A (WCA-3A) in the extreme northwest corner. This corner of WCA 3-A is at a slightly higher elevation than the remainder of WCA 3-A and is under the influence of Levee 28 and Canal 123 resulting in lower water levels with a reduced hydroperiod. The proposed project would deepen and widen the existing borrow canal to provide conveyance of water to WCA 3-A. Two water control structures are proposed to be constructed within Canal 139 to increase dry season water levels within the Canal 139 drainage basin. The proposed project may result in the degradation of water quality by the deepening of the existing canal and by the introduction of excessive nutrients through feeder canals. Adverse impacts on biological resources may result from prolonged periods of high water within WCA 3-A.

The applicant has not provided reasonable assurance, pursuant to Sections 17-4.07 and 17-4.28, Florida Administrative Code, that immediate and long-term impacts of the project would not result in violations of State water quality standards for Class III waters. Specifically the standard which would be affected is:

> Dissolved Oxygen - in predominantly fresh waters, the concentration shall not be less than 5 milligrams (mg)/l. In predominantly marine waters, the concentration shall not average less than 5 milligrams (mg)/l in a 24-hour period and shall never be less than 4 milligrams (mg)/l. Normal daily and seasonal fluctuations above these levels shall be maintained in both predominantly fresh waters and predominantly marine waters.

However, should the Department grant an exception from the dissolved oxygen criteria pursuant to Section 17-3.031, Florida Administrative Code, the Division intends to issue the permit.

Should you wish to dispute a material fact of this proposed agency action, a petition for a formal hearing must be filed in accordance with the provisions of Section 120.57, Florida Statutes. The petition must be filed within fourteen (14) days of receipt of this notice. You may elect instead to request an informal hearing, if appropriate, pursuant to Section 120.57(2), Florida Statutes. The petition must comply with the requirements of Section 28-5.201, Florida Administrative Code, (copy attached) and be filed with the Secretary of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301. Petitions which are not filed in accordance with the above provisions will not be accepted by the Department. At such formal hearing all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of facts and order, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel.

Executed this 20 day of May, 1980, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION:

Stephen P. Walker, Chief
Bureau of Permitting

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

IN RE:

Application by the SOUTH FLORIDA WATER)
MANAGEMENT DISTRICT for Water Quality)
Certification for "Hendry County Project") STIPULATION
DER File Number 26-15062)
- -)

The SOUTH FLORIDA WATER MANAGEMENT DISTRICT and the DEPARTMENT OF ENVIRONMENTAL REGULATION for purposes of this proceeding hereby stipulate and agree that:

1. The DEPARTMENT OF ENVIRONMENTAL REGULATION has jurisdiction under Chapter 253, Florida Statutes, to require permits authorizing construction and other activities described in the application which is the subject of this proceeding.

2. None of the activities or construction, including the construction of the proposed Spillway S-239, as described in the application which is the subject of this proceeding, constitute construction of islands or an addition to or extension of existing lands and islands so that approval of local governments as described in Section 253.124, Florida Statutes, is not required.

This Stipulation is executed by counsel for each party on the date shown.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P. O. Box V, 3301 Gun Club Road
West Palm Beach, Florida 33402

May 13, 1980

By
STEPHEN A. WALKER
Of Counsel

DEPARTMENT OF ENVIRONMENTAL REGULATION
2600 Blair Stone Road
Tallahassee, Florida 32301

May 16th, 1980

By

STATEMENT OF JOHN C. JONES, EXECUTIVE DIRECTOR, FLORIDA WILDLIFE FEDERATION

My name is John C. Jones, and I am Executive Director of the 40,000-member Florida Wildlife Federation, located at 4080 North Haverhill Road, West Palm Beach, Florida. I very much appreciate the opportunity to be here today in regard to water management projects in Florida.

Some serious mistakes have been made in South Florida over the past three decades in water management. Channelization of the Kissimmee River, and drainage of vital wetlands through a system of canals and levees have caused water quality and water quantity problems throughout the region.

Recognizing the need to correct some of these past mistakes, the Florida legislature passed the Kissimmee River Restoration Act in 1976, calling for returning the meandering Kissimmee back to its natural state. The U.S. Army Corps of Engineers is completing a restudy of the project at this time.

Coastal areas are suffering salt water intrusion as a result of the overdrainage of inland wetlands. These coastal areas are the fastest growing areas in the state, and are among the fastest developing areas in the nation. As the water demand increases, the water supply decreases.

Into this scenario comes what is known as the "Hendry County Plan," a blatant Federal subsidy of a handful of large landowners.

The Environmental Impact Statement prepared by the Army Corps of Engineers claims there are 21 landowners who stand to benefit from the project. The fact is, six landowners own the vast majority of the land involved. The name "Hendry County Project" is a misnomer. It would be more appropriate to call it the "U.S. Sugar Project."

The EIS estimates the cost of construction of the Hendry County Plan to be $11 million. State estimates the cost at $28 million, with an annual operating cost of $1 million, which the taxpayers of the eighteen county water management district will be required to pay. The urban taxpayer from West Palm Beach, Ft. Lauderdale, and Miami will be forced to pay 97% of the operating costs to subsidize the six major landowners' agricultural projects, according to a study done by Dr. Paul Roberts, an economist at the University of Maryland, for the state.

Taxpayers are in revolt all across the nation, and Florida's taxpayers are no exception. We are tired of being taxed to subsidize the corporate giants, at the expense of the environment.

Broward County's Commission held a hearing on May 22, 1979, in Ft. Lauderdale on the permit request of the Water Management District to construct a portion of the project in Broward County. After several hours of testimony, where approximately 300 persons came to oppose the project, the Commission unanimously turned down the permit. Not a single Broward resident supported the project, and in fact, some Hendry County residents appeared to oppose the permit.

At that hearing a representative of the Department of Environmental Regulation admitted the project would not meet state and Federal water quality standards.

The drainage water from the Hendry County project would be discharged into Water Conservation Area III, a water recharge area for the Biscayne Aquifer, which has been designated by the U.S. Environmental Protection Agency as a sole source of water for Dade and Monroe Counties.

It is interesting to note that the staff of Department of Environmental Regulation has opposed this project. The staff of the Division of State Planning opposed the project. The staff of the Game and Fresh Water Fish Commission opposed the project. The staff of the National Park Service has opposed the project. The staff of the U.S. Fish and Wildlife Service has opposed the project. Only the South Florida Water Management District has fully supported this project.

It is true that the heads of many of these agencies have since publicly come out in support of the plan, a fact which attests to the political pressures involved in this project. When asked why the DER was supporting such an environmental boondoggle, an official responded, "Because the Governor wants it."

The Hendry County Plan is not a benefit to Hendry County residents. It is not a benefit to neighboring counties. It is a sweetheart deal for U.S. Sugar Corporation and a few other land barons--people who have fattened the campaign coffers of the politicians who are supporting this project.

RESOLUTION OF BROWARD COUNTY (FLA.) BOARD OF COUNTY COMMISSIONERS

WHEREAS, the Broward County Board of County Commissioners held a public hearing on May 22, 1979, and unanimously voted to deny the statutorily required local approval to the South Florida Water Management District and United States Army Corps of Engineers to do the necessary dredging in connection with the Hendry County Flood Control Project; and

WHEREAS, the Broward County Board of County Commissioners has consistently and continuously opposed the Project and has brought that opposition to the attention of our elected officials in Washington, D.C., in the past; and

WHEREAS, the Broward County Board of County Commissioners authorized retention of special counsel Kenneth F. Hoffman, of the firm of Oertel and Laramore, P.A., Tallahassee, Florida, to represent Broward County in the State administrative hearing held in West Palm Beach, Florida, on November 17-20, 1980, before Administrative Hearing Officer Michael Dodson and attendent matters regarding this Project; and

WHEREAS, the basis of the Board's opposition is founded upon the threat the Project poses to the environment, water quality in general, the Biscayne Aquifer, wildlife and plant life; and

WHEREAS, the Florida Department of Environmental Regulation disregarded statutorily mandated local approval in issuing its Intent to

Approve the permit and in entering into a Stipulation with the South Florida Water Management District that local approval was not required; and

WHEREAS, the Project is estimated to cost approximately $20 million (in 1980 dollars); will require an estimated $1,000,000 (in 1980 dollars) to maintain on a yearly basis; the benefit of which will accrue to a small number of landowners and have a severely negative environmental impact on Broward County; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA, that:

1. The United States Congress should discontinue all support and funding of the Hendry County Flood Control Project.

2. In light of the severe economic crisis the United States is experiencing, an expenditure of such magnitude for this type of Project for the benefit of a few large landowners is inflationary in effect.

3. The Board supports the Administration's objective of controlling runaway inflation which is severely impacting local government, and the elimination of this Project will work toward that end.

ADOPTED this 3rd day of March, A.D. 1981.

RESOLUTION OPPOSING REDESIGN OF THE HENDRY COUNTY PROJECT

WHEREAS, at a public hearing held on May 22, 1979, the Broward County Commission denied the United States Army Corps of Engineers permission to conduct dredging operations in Broward County in connection with the Hendry County Flood Control Project (C-139), also known as the Hendry County Project, which Project would involve drainage by enlarged canals and mechanical pumps of approximately 261 square miles of Everglades wetlands in Hendry County, the outfall to be dumped into the northwest corner of Broward County, Conservation Area 3-A, about 35 miles from Andytown; and

WHEREAS, the correspondence presented to the County Commission at such public hearing and the minutes thereof, which documents describe the basis for the County Commission's opposition to the Hendry County Project, are attached hereto as Composite Exhibit "A"; and

WHEREAS, it has come to the attention of the County Commission that the Corps of Engineers is contemplating a redesign of the Hendry County Project which would avoid the necessity of County Commission approval, but which may nevertheless involve an adverse environmental impact on water quality within Broward County; NOW, THEREFORE,

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF BROWARD COUNTY, FLORIDA:

Section 1. That the County Commission opposes any changes by the United States Army Corps of Engineers of the Hendry County Project which would avoid the necessity of County Commission approval if such Project would have an adverse impact on the water quality of Broward County.

Section 2. That the County Commission requests that it be kept informed by the Corps of Engineers of all Corps activities relating to the planning or development of the Hendry County Project.

Section 3. That the County Commission hereby reaffirms its right and intention to seek any available remedy to enforce this Resolution.

ADOPTED this 9th day of October, 1979.

BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS

By ______________________
Chairman

STATEMENT OF S. C. MILLS, LABELLE, FLA.

Mr. chairman, I am S.C. Mills, a fifth-generation landowner in the area affected by the so-called "Hendry County Plan." My purpose in being here today is to tell you in the strongest and most forceful manner possible that I oppose this project.

This project is only for a small number (perhaps only six) of land owners and companies. The public interest would not be served. It is time to allow this project, conceived as best I can determine in 1949, to die an unmourned death.

This project is designed to drain. I am more concerned about bringing water to my land, as well as drainage, due to the severe droughts which we have experienced in the past.

It is beyond my comprehension that federal and state authorities would consider spending large sums of federal and state tax money for a canal in the L-1, L-2, L-3 area, when existing canals (with minor alternations), would be adequate when supplemented with the construction of the C-1 Extension that has been suggested by Col. Gee to the Corp. of Engineers, Dist. Jacksonville, Florida.

The cost-benefit ratio obviously is beneficial due to the fact that most of the suggested conveyance canal (C-1 or North Extension) is already in existence.

I fail to see where using federal and state tax money to construct a canal some 36 miles long, or even enlarging by several times the existing canals for that distance, will continue toward solving the problem for these reasons:

1. Under existing conditions, we have excessive water impact on Conservation Area 3;

2. During the rainy season, the lower end of L-3 experiences extensive flooding conditions;

3. When construction of C-139 is completed, it is my understanding that the "Skip Batalis culverts" leading into L-28 will be removed, thus eliminating the L-1, L-2, and L-3 water from being pumped by the S-140 pumping station; and

4. Also after construction, the culverts leading into C-4 will be removed, thus eliminating any L-1, L-2, L-3 water from reaching the S-8 pumping station located on the Miami Canal;

5. At the completion of construction of C-139, the west and south sides of C-139 will be a continuous dyke. All water that goes into C-139 form adjacent lands will need to be pumped. This will make it impossible to operate our ranch,

farming and timber operation due to the extreme expense of installing, maintaining and running the necessary pumping stations to remove the blocked water from the canal.

6. If the construction of C-139 involves the removal of rock in the Hudgman borrow pit (bar pit), this will cause an over-drainage on our Flaghole Ranch because there will not be sufficient water pumped back into the C-139 system to offset seepage from our land into the canal;

7. Construction of the C-139 right-ofway will result in the destruction of oak, pine and cypress trees on Set 8, North End; and

8. The construction of C-139 will make it necessary to dyke the entire west boundary of our Flaghole Ranch to connect to the new dyke on the south side of C-139 to prevent our ranch property from becoming a reservoir.

In conclusion, I am completely opposed to the construction of C-139.

We believe that construction should begin on the South End so there will be some place for excess water to go.

We believe that more structures should be put in the canal to control flows in and out.

We believe water should be put into the system before extensive drainage is accomplished.

I cannot understand why an appropriation should be considered when the project is not even permitted by the State and there is little likehood that it will.

The water that is backed up on the West Side against the L-1 levee could have a practical value in recharging the drainage districts with good, pure, and clean irrigation water--much of which has been filtered naturally through ponds and sloughs. This water is needed in Lake Okeechobee, in my opinion, to upgrade the agricultural waters and to help maintain a desirable lake level.

Thank you for the opportunity of appearing here today.

MEMORANDUM FROM BROWARD COUNTY (FLA.) BOARD OF COUNTY COMMISSIONERS

SUBJECT: Hendry County Drainage Project

The Board of County Commissioners strongly opposes the appropriation of taxpayers' money for the so-called "Hendry County Project."

The proposed project, costing $18 million in federal and state taxpayers' money, will benefit a few large landowners in Hendry County, while potentially damaging Broward County. The project calls for expenditure of public funds for private benefit.

For the reasons set forth in the attached extracts from the "Report To The Congress" by the Comptroller of the United States, dated November 13, 1980, and for the reasons set forth in the attached copy of a "Proposed Recommended Order of Petitioner, Broward County" which was filed in a Florida Administrative hearing in which Broward County opposes the project under State law, the requested appropriation should be struck from the proposed legislation.

SHEYENNE RIVER FLOOD CONTROL PROJECT, NORTH DAKOTA

STATEMENT OF GREG DOFFIN, SHEYENNE VALLEY ASSOCIATION

ACCOMPANIED BY JOE MILTON, JR.

Chairman HATFIELD. Next is the Sheyenne Valley Association.

Mr. DOFFIN. Good morning. I am Greg Doffin with the Sheyenne Valley Association in Kindred, N. Dak., speaking on the flood control project in the lower Sheyenne River in North Dakota.

For the last few years, the Army Corps of Engineers has been studying the problem of flooding on the lower Sheyenne with two basic alternatives, the first being a large dam upstream of the main population center, the city of West Fargo, and the second being a diversion of the levee system around the city of Fargo.

Our association is opposed to the dam. We feel it is a very costly alternative. It is 25,000 acres of land and between 50 and 73 families would lose their homes and farmsteads. The estimated cost today is between $50 and $60 million.

The diversion, on the other hand, requires about 250 acres of land. No relocations are necessary. The cost is estimated between $14 and $17 million. At the standard project flood height of levee construction, the Corps estimates it gives more protection to the city of West Fargo than does the dam upstream.

The Army Corps of Engineers is proposing to continue studying the flood control problem and looking at the diversion and levee system around the city of West Fargo.

I would also like to touch on the problem of flooding downstream of West Fargo. This area of North Dakota is very unique. It is the bottom of an old lake, incredibly flat land, 1,000 to 5,000 for miles on end. Downstream of the city of West Fargo the Sheyenne is joined by the Mabel and Rush Rivers, and shortly thereafter itself joins the Red River. A combination of this flat land and the confluence of four separate river systems means that the farmsteads and residences in this area cannot be fully protected by flood control projects on any one of the rivers since they could be flooded by any or all of the rivers at once.

The Army Corps of Engineers is studying a system of individual residence ring levees—a levee only around the buildings, homes, and families. This we feel is the one solution that does protect the lives of these people. It handles flooding no matter which river is flooding.

I am here today to ask you to continue funding the flood control study, because we approve of that direction which the Corps has taken. I would also like to say the last three pages of our testimony on the ring levees were prepared by the Army Corps of Engineers. Thank you.

Chairman HATFIELD. Thank you very much, Mr. Doffin. Your testimony was very fine. We will take a very hard look at your position.

Mr. DOFFIN. Thank you.

[The statement follows:]

JOINT STATEMENT OF JOE MILTON, JR., AND GREG DOFFIN, SHEYENNE VALLEY ASSOCIATION

Summary: The Sheyenne Valley Association supports funding for continued studies of diversion-type proposals to reduce Sheyenne River flooding problems and encourages Federal support for the construction of farmstead ring dikes.

The Sheyenne Valley Association is an organization of farmers, ranchers and other concerned citizens in Southeastern North Dakota. We and our predecessor organizations have appeared at Congressional hearings over the course of 12 years in the hope that some solution to Sheyenne River flooding problems other than the Kindred Dam could be implemented. We have appeared before you and outlined what we felt were the economic, social and environmental problems with this large dam project.

After five years of a re-formulation study, the Corps has recommended continued studies of flood control proposals based on a diversion around the major population area on the Lower Sheyenne River and is not recommending further consideration of the Kindred Dam. We endorse this direction of the Corps and hope you will provide funds for these further studies.

There is a growing recognition in the Red River Valley that a certain amount of flooding is inevitable in our table-top flat region and that total freedom from floods, provided through Federal tax dollars, cannot be achieved. It doesn't appear that it will be possible to protect agricultural lands in the Lower Sheyenne Basin to any appreciable degree. Therefore, we must look at accomplishing flood protection where it is needed most -- for the protection of life, homes and farmsteads. We are glad that this kind of protection is available through a diversion in urban areas and ring dikes around rural homes and farmsteads.

The idea of ring dikes or levees seems to be particularly promising because there are few alternatives for protecting homes and farmsteads in an extremely flat area where much of the flooding comes not only from the rivers, but also from overland or sheet flooding moving very slowly toward the rivers. Ring dikes differ from agricultural levees in that they simply "ring" the immediate farmstead -- home, outbuildings, machinery, stored grain, etc. -- and do not significantly impede water flow.

We are especially concerned that there be some kind of Federal cost sharing to help local people build these ring dikes. If benefits can be claimed for flood damage reduction to rural homes and farmsteads due to the construction of a dam or another such massive project, it is reasonable that the same benefits can be claimed for ring dikes and therefore used to justify Federal involvement in their construction. Certainly, protection of these properties is in the Federal interest since there would be fewer claims for disaster loans or payments than when floods occur without protection. The cost of protecting these properties will only go up in the future, so it would be wise to begin as soon as possible. According to the St. Paul District Corps of Engineers, the Corps does have the authority to study and construct such small flood control projects. Some local people would be anxious to begin construction of ring dikes if they only knew what kind of government support will be available. We urge you to make funds available for such projects.

Diversions and ring dikes meet the criterion of placing the negative impacts of a project in the area where the benefits will be received. These negative impacts need to be evaluated fully so that those who live in the local area can realistically weigh the costs. We support them in their efforts to obtain full knowledge about the proposals' effects, both negative and positive.

We are as committed to working for implementation of one of the remaining solutions as we were committed to pointing out the serious problems with the dam proposal. Now that the Corps has been able to identify solutions which appear to be economically viable and socially and environmentally acceptable, we hope that funds will be available to bring these plans to reality.

FARMSTEAD RING LEVEES

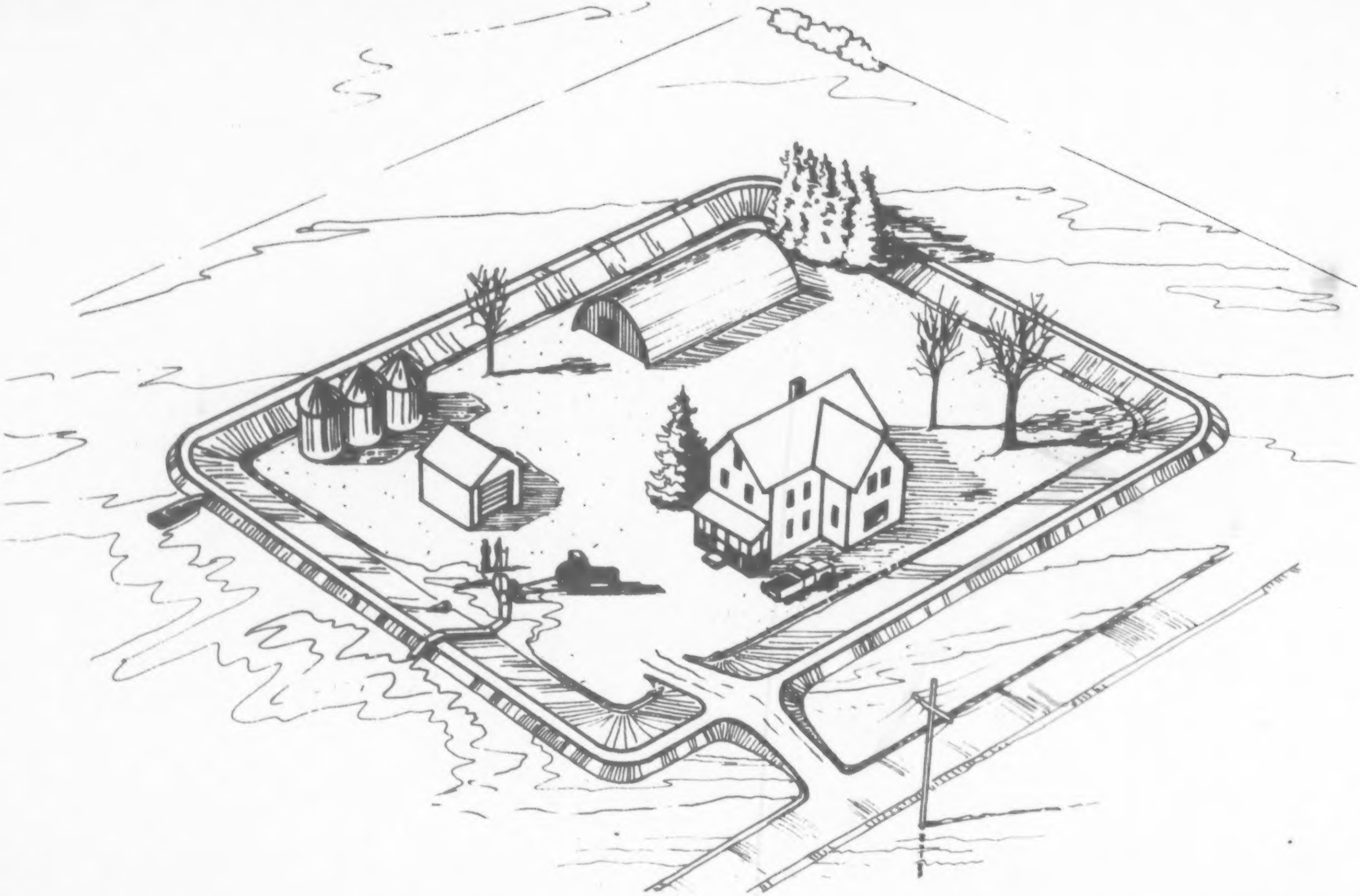
The rural residents of the Red River Valley have been subjected to a number of large floods in recent years. Although some individual farmers have taken measures to protect their property, many farmers, particularly along the Red River main stem, continue to experience significant flood damages. Because of the size of the flood-prone area and the time involved in implementing large-scale projects to protect this area, it is reasonable to consider measures that can be implemented on a short-term basis to protect individual farmsteads.

The Corps of Engineers is initiating a program in the Red River basin to study the feasibility of developing ring levees around each farmstead to protect the buildings, machinery, and farmyard from the frequent flood damages. Under Section 205 of the 1948 Flood Control Act, as amended, the Corps has the authority to study and construct feasible small flood control projects provided that a local sponsor is identified and the Federal cost does not exceed $2 to $3 million. The higher limit on Federal cost applies to areas that receive an official disaster declaration within 5 years from the time the Chief of Engineers determines a project is necessary. All projects must meet the normal economic, environmental, and engineering criteria and be approved by the Chief of Engineers. The approved projects are placed on a priority list and are implemented as funds become available.

The initial study, done on a county-by-county or watershed basis, would need to be requested by an appropriate unit of local government capable of meeting the requirements for local cooperation. The local interests are required to provide all lands, easements, rights-of-way, and utility relocations, which typically amount to about 20 percent of the total project cost.

The basic concept of implementation would require that a farmer voluntarily request help in developing a ring levee around his property. However, before receiving Federal assistance, farmers would be required to agree that they would not encroach on the designated floodway. This floodway would be the area of the channel and those portions of the floodplain adjoining the channel that are reasonably required to carry floodwaters.

The attached drawing depicts a ring levee around a typical farmstead in the Red River Valley. The structural design of the levee would be consistent with existing criteria calling for a freeboard allowance above the design water surface profile to protect against overtopping. Water inside the levee would be disposed of by means of a tractor-driven pump during floods and by gravity flow during normal conditions. Aesthetics, sanitary conditions, water supply, maintenance, and other factors would all need to be considered in the development of each individual farmstead ring levee.



CAMP GROUND LAKE, KY.—OPPOSITION

STATEMENT OF EUGENE ROYALTY, BEECH FORK PRESERVATION ASSOCIATION, SPRINGFIELD, KY.

Chairman HATFIELD. Mr. Joe Bodine, president, Beech Fork Preservation Association.

Mr. ROYALTY. Mr. Chairman, I am Eugene Royalty. Mr. Bodine could not come. I am a member of the Beech Fork Preservation Association.

I come to you as a farmer and a landowner who will lose land to the proposed lake. I am not going to read this statement. I will make a few remarks. You can read the testimony later.

I also come to you as a member of a church which will be, in all likelihood, completely disbanded due to the impoundment of the proposed lake. I also come to you as a resident of Washington County which will lose one of the loveliest valleys that we have and the only State park, Lincoln-Holmes State Park. We won't really lose it, but it will end up being a mud flat under the proposed plan as it is right now. We will also lose an old resort hotel and the last covered bridge we have in the community.

As you can surmise from what I am saying, if I can use Kentucky talk, "I'm agin' it."

I would like to list a few reasons why we feel we have a valid reason for being here today to do our doggonedest to convince you we don't need this project. As a farmer, we are very concerned with the loss of our land. We need all the help we can get. But we don't feel that this proposed lake is what is going to help us. In fact, we think it is going to hurt us, because we will lose too much of our land. In fact, all of our prime land will be used up by the year 2000 at the present rate, according to some statistics.

There are three different points on this lake. We testified last year, our brothers, that we would rather not see the lake come in. Since that time there have been two or three important changes that we think should be of concern to this committee.

I am not so naive as to think that for the public good my own little pet peeve should be adhered to. But for the public good in this particular instance, I think that we have people of a higher nature than what I am just looking at in this. They also have decided it is not for the public good.

There are about three reasons for building the lake—water supply, recreation, and flood control. Those seems to be uppermost in the minds of those who wanted to build it.

We have attached to the testimony a copy of a letter of November 1980 from the commissioner of parks, Mr. Lou Karibo, which states that they have absolutely no interest in cost sharing on recreation. Now right next to us—in fact, my daughter has lost her home to Taylorsville Lake. Taylorsville Lake is in bad trouble right now as far as trying to be constructed. They are having difficulty getting any recreation cost sharing from the State of Kentucky. And to put your mind at ease that I am not just flat against everything, I think it should be completed because all the land has been taken and the people have been removed from their homes. I think it would be better for the State of Kentucky if that one were to be completed.

But ours is not nearly so far along. According to this official letter, they say that they are not willing to cost share at all unless it can be proven to them by the department of natural resources that it is needed.

Also attached to our testimony is a letter from the commissioner of natural resources, Jackie Swigart, which was dated in December 1980, subsequent to the letter of the commissioner of parks, in which they state they don't really see any need for any more water supply.

The water supply was a big issue when we came up last year to testify. It seems in order to justify the lake, somebody has to be willing to make a commitment to purchase about 177 million gallons of water per day from this lake. As of today, we have no commitment whatsoever from anyone that they will be willing to purchase any water. So we feel that the recreation and water supply are dead issues as of right now.

CHANGING SITUATION

Flood control is the one thing I always felt was a valid reason for the lake being in existence. But the situation has changed on that so much since 1967 or 1968, when I first became aware of the lake. The situation has changed completely as to why the lake was to be built at that time. Right now the flood control benefits have been cut to less than half of what they were back at this time. It also seems from information that we have gotten from our Congressman that this lake was to be part of a big project that was for the salt water river basin, composed of campground at Taylorsville Lake and possibly Howards County Lake. His opinion to us was that the Howards County Lake will never be built because the people have pretty well voiced their opinion that they do not need or want the Howards County Lake.

The Taylorsville Lake is in trouble. They feel that there would be absolutely no economic justification for building it apparently.

Chairman HATFIELD. We have only, you know, study money in this bill, so I just want to remind you that is all there is. There is no construction money.

Mr. ROYALTY. I am aware of that; yes. We just would feel a lot more comfortable if we stopped the study money.

Can I say one more word? What seems sort of ironic to us there in the county—I know this probably does not come under your bailiwick—but we do have right now a 150-acre lake that was built with the construction of I–55 and it is close to the interstate that was built with the idea of the water supply being pumped to the county. It was built where it could be pumped from three different water levels—about 150 acres, 155 acres, and about 70 feet deep at its deepest level.

Thus far we haven't gotten anyone interested in helping to do something of this nature. We feel that before we spend all of this money on something that we feel is unneeded, that if we can just spend a little bit or part of this money that was spent on studying that, we could put water in for the whole county.

Chairman HATFIELD. Thank you very much.

Mr. ROYALTY. Thank you.

[The statement follows:]

STATEMENT OF EUGENE ROYALTY, REPRESENTING THE BEECH FORK PRESERVATION ASSOCIATION

My name is Eugene Royalty. I am representing the Beech Fork Preservation Association of Springfield, Kentucky. We are here to go on record as opposing the Army Corps of Engineers' proposed Campground Lake in Washington, Nelson, and Anderson Counties in Kentucky.

In January, 1981, we received notice that Representative William Natcher had asked for more study funds, $460,000, for further Phase I study on Campground Lake. We ask that the request be denied and that the entire project be scrapped. President Reagan is trying to cut unnecessary spending. We believe that Campground Lake is not only unnecessary, but would be detrimental to the economies of the counties involved. Some of our reasons for opposing the project are as follows:

This dam will take approximately 18,500 acres, much of which is prime farmland. According to the recently released National Agricultural Lands Study, the present rate of loss of farmland will result in a depletion of the nation's cropland base by the year 2000. This high rate of depletion is accompanied by a rise in production demands. The Kentucky Soil Conservation Service estimates that Kentucky loses 15,000 to 20,000 acres of its best farmland to non-agricultural uses each year. Given this situation, we feel it would be economic suicide to build Campground Lake.

Campground Lake will not only take away valuable and needed farmland. It will do serious damage to the existing family farm economy of the affected counties. In contrast to national trends, Washington County's family farm base is not only stable, but is improving. According to the 1978 agricultural census, the number of family farms in Washington County had increased from four years before. At a time when there is growing concern about the decline and disappearance of the family farm, we feel that the building of Campground Lake would be a serious mistake. The displacement of over 100 farm families could only lead to greater property taxes and an increased burden on existing social programs.

Flood control was considered a major benefit in the original Corps plan. Since the authorization of Campground Lake in 1974, these flood control benefits have been reduced by over one-half. This is because there is little development in the flood plain below the dam site. There are small communities with populations between 500 and 1,500 which would supposedly be protected by Campground Lake. But these communities suffer from localized flooding from tributaries and backwater. They would be best protected, at low cost, by local protection projects such as flood walls and levees and by participation in the flood insurance program.

Flood control benefits have been further reduced by the fact that Howardstown Lake will probably never be built. Howardstown, Taylorsville, and Campground Lakes are all part [illegible] the Salt River Basin Project designed to provide flood protection for the community of Shepherdsville. Last year, immediately afater testifying before the House Subcommittee, members of Beech Fork Preservation Association met with Representative William Natcher. During that interview, Congressman Natcher stated that he felt Howardstown Lake would never be built because the people of the area had demonstrated that they do not want or need this lake. Without the Howardstown project, the flood control originally planned for the Salt River Basin cannot be accomplished. As stated earlier, we think there are more effective approaches to flood-control than to build a multi-million dollar dam. With its original flood-control benefits so sharply reduced, Campground Lake makes no economic sense at all.

Recreation was also a major benefit of the original plan for Campground Lake. The Commonwealth of Kentucky has, since then, indicated that they are absolutely unwilling to cost share on recreation. The Louisville District Corps received a letter from Lou Karibo, Commissioner of Kentucky's Department of Parks, in November, 1980, recommending that Campground Lake remain inactive or be deauthorized. (see enclosed letter) Taylorsville, built for recreational purposes has been plagued with financial difficulties and given the Commonwealth's financial problems it is unlikely that the recreational potential of Taylorsville Lake will ever be realized. In view of the difficulties of Taylorsville Lake, the economic justification for constructing Campground Lake for recreation is highly questionable.

Water supply is now listed as a major benefit of Campground Lake, although in the original plan only 6% of the bnefits were for water supply. In order for Campground Lake to be feasible, the Corps must have commitments from potential users for 177 million gallons per day (MGD) of water supply storage space. There are no solid commitments for any of this water. The Commonwealth of Kentucky had previously committed itself to 10 million gallons per day, but has recently withdrawn this commitment. The Louisville District Corps received a letter from Jackie Swigart, Secretary of the Department of Natural Resources in December, 1980, stating:

> "Based on our current information concerning this project, we have determined that a substantial amount of water supply is not currently in demand in the vicinity of the proposed reservoir, nor is there a likelihood of a 10.0 mgad areal demand in the foreseeable future. Recent improvements in the raw water system of Bardstown and Lebanon, the presence of Willisburg Lake, the proximity of the Taylorsville project, and the current financial situation of the Commonwealth appear to preclude the participation in the water supply storage aspects of the proposed project, based on available information....Thus, based on current information, we would not anticipate Commonwealth participation in the water supply aspects of the Camp Ground project."

The Commonwealth's withdrawal of participation in recreation or water supply virtually eliminates support for Campground Lake at the state level. We believe that the state's current position is consistent with the basic economic policies now being supported by the present administration. It should be noted that the present estimated cost for Campground Lake is $124,227,000 according to the Corps' own figures. That is $26,520,000 more than the estimated cost of 1978. With the annual benefits estimated at only $12,637,000, Campground Lake does not make economic sense.

In conclusion, we the Beech Fork Preservation Association, would like for you to consider withdrawing financial support for further studies so that deauthorization efforts may proceed. Let our members have peace of mind and forget about someone coming to tell us they are going to cover our homes, farms, churches, cemeteries and communities with water. We feel we have enough lakes in Kentucky. Why cover more of our prime farmland which we need so badly?

LETTER FROM LOU KARIBO, COMMISSIONER, KENTUCKY DEPARTMENT OF PARKS

November
24
1 9 8 0

C. E. Eastburn
Colonel, Corps of Engineers
District Engineer
Department of the Army
Louisville District Corps of Engineers
P. O. Box 59
Louisville, Kentucky 40201

Dear Colonel Eastburn:

In response to your letter of November 12, the Department of Parks does not foresee the need for recreational development in association with Campground Lake. We already are planning such development at Taylorsville, which is in the immediate vicinity, and we continue to have very serious difficulties with the provisions of the Federal Water Project Recreation Act (P.L. 89-72). Under the terms of P.L. 89-72, we have very little control over what is built or its cost, and following Judge Allen's ruling, we cannot finance P.L. 89-72 projects over a long term without violating both the Kentucky Constitution and 42 U.S.C. Sec. 1962 (d)-5b. Finally, the Commonwealth's difficult financial position makes it impossible to proceed at this time with a project having the magnitude of the proposed Campground Lake development.

Unless the Department for Natural Resources and Environmental Protection determines that the need for water supply storage is enough for the project to proceed, we would recommend that it either remain on your inactive list or be deauthorized.

We appreciate the continued cooperation and assistance of your staff and recognize the Corps of Engineers' contribution to the State.

Sincerely,

Lou Karibo

Lou Karibo, Commissioner

LETTER FROM JACKIE SWIGART, KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

December 23, 1980

Colonel C. E. Eastburn
District Engineer, Louisville
U. S. Army Corps of Engineers
P. O. Box 59
Louisville, Kentucky 40201

Reference: Camp Ground Lake

Dear Colonel Eastburn:

This letter is in response to your request of November 12, 1980, for clarification of the Commonwealth's position with regard to the need for water supply storage space in Camp Ground Lake and the willingness of the Commonwealth to assume the costs of same.

It is our understanding that the Corps is still in the process of finalizing the Phase I General Design Memorandum and the Stage I reconnaissance report for Camp Ground Lake. Prior to formulating a final Commonwealth position with regard to water supply needs and cost assumption for this project, the Department would prefer to first review this information, when available, and establish a position on the basis of the latest available data and with regard to all relevant issues.

Based on our current information concerning this project, we have determined that a substantial amount of water supply is not currently in demand in the vicinity of the proposed reservoir, nor is there a likelihood of a 10.0 mgd areal demand in the foreseeable future. Recent improvements in the raw water systems of Bardstown and Lebanon, the presence of Willisburg Lake, the proximity of the Taylorsville project, and the current financial situation of the Commonwealth appear to preclude participation in the water supply storage aspects of the proposed project, based on currently available information. The Department of Parks' recent declination of participation in the recreation aspects further reduces Camp Ground Lake's ability to serve as a "multi-purpose" project.

Thus, based on current information, we would not anticipate Commonwealth participation in the water supply aspects of the Camp Ground Lake project. However, pending receipt and review of the Phase I General Design Memorandum and the Stage I reconnaissance report, the Department will delay making a final determination.

Thank you for the opportunity to respond to this subject. We look forward to continued communication and coordination with you and your office.

Sincerely,

Jackie Swigart
Secretary

HUMBOLDT RIVER AND TRIBUTARIES, NEV.—OPPOSITION

STATEMENT OF DELBERT REESE, MEMBER, BOARD OF DIRECTORS, UPPER HUMBOLDT WATER USERS

Chairman HATFIELD. Mr. Delbert Reese, Upper Humboldt Water Users.

Mr. REESE. Good morning. My name is Delbert Reese. I am a member of the board of directors of the Upper Humboldt Water Users Association.

The association is an organization of ranchers and landowners residing in or near Elko, Nev., and consists of almost all of the waterusers on the Humboldt River north and east of the Rye Patch Dam in northeast Nevada and its tributaries. Our group also works very closely with the Pershing County Water Conservation District, an organization which represents all waterusers south and west of the Rye Patch Dam.

For many years the association has opposed the construction of the U.S. Army Corps of Engineers proposed Humboldt River project. In recent years we have appeared before your subcommittee annually to reiterate our opposition. Because many of our objections have already been submitted into your records, I will not restate them here today.

Instead, I will concentrate on our specific objections to further appropriations of funds for the Humboldt River project. The association's objection to such appropriations is twofold: First, the association objects to further appropriations until the Corps has completed and publicly released its final phase I design memorandum for the project. Last year the Corps was appropriated $300,000 for the Humboldt River project. At that time, the Corps represented that this amount would be sufficient to cover the cost of completing the phase I project. We are advised by Corps officials that it expects to publish the final version by December 1981.

This is crucial since the draft of phase I has just last week been shown to our Washington counsel. We have not had the opportunity to study the document and comment on it. Hearings will be held in December when the final version is public. Only after that has occurred will information necessary to decide whether to proceed with the project as authorized be available. Two of the three proposed reservoirs have already been deferred because 1978 economic studies indicated they were not economically feasible. We think, using proper cost benefit analyses, that the third—the Hylton Dam—is also not feasible.

Under these circumstances, it would be improper to appropriate additional planning money now, since the Corps has yet to complete the project's plans with appropriations allocated to it in fiscal year 1981. Furthermore, it would be premature and, therefore, inappropriate for Congress to authorize additional funds for any other purpose for the project until the Corps has completed phase I of the planning process.

Second, the association challenges the Corps' basic contention that the dam is necessary to protect the ranchers from the harm caused them by flooding. According to the findings of a study recently released by the University of Nevada at Reno, irrigated lands and forage production in the study area increased by 51 percent and 92 percent, respectively, as a result of flooding in the study area. This conclusion conflicts with the Corps' position that minor floods usually result in sedimentation and erosion damage which, according to the Corps, reduces yield per acre.

In a letter to one of our association members dated October 17, 1979, the Corps stated that the Hylton Dam would eliminate annual flood damage by an amount estimated between $9,000 and $12,600 per year on our ranch in acres situated between the dam and the main stream of the Humboldt River, and some $457,000 for all ranches in the area per year.

I am the manager of the only ranch that lies between the proposed Hylton Dam and the main stream of the Humboldt River. I feel, therefore, uniquely qualified to report that in the heavy runoff years our yield of wild hay actually increases. We do not want to have the Federal Government protect us from that which helps us.

In conclusion, I would like to state that the association is only one of many organizations of concerned ranchers and landowners that has gone on record in opposition to the Humboldt River project. Attached to my testimony is a letter from the Nevada Cattlemen's Association and a letter from the Nevada Farm Bureau Federation. Ranchers are the very individuals who, according to the Corps, stand to benefit the most from the construction of the dam. Rather than support the project, however, the association appears today to reiterate its vigorous opposition to the project and requests that Congress not appropriate additional funds to the project until the Corps has demonstrated that such appropriations are authorized.

On behalf of the association, I would like to thank the members of the committee for giving us this opportunity to present our views.

Chairman HATFIELD. Thank you very much, Mr. Reese.

[The attachments follow:]

LETTER FROM PAUL D. BOTTARI, EXECUTIVE SECRETARY, NEVADA CATTLEMEN'S ASSOCIATION

March 25, 1981

Delbert Reese
Maggie Creek Ranch
Elko, NV 89801

Dear Delbert,

As you are going to Washington soon on behalf of the Upper Humbolt Water Users Assn I would like to take this opportunity to pass on the Nevada Cattlemen's Assn's support to your efforts. The Nevada Cattlemen's Assn has been on record in opposition to the proposed upstream storage projects on the Humbolt River since their first proposal. Unfortunately the committee concerned with this issue forgot to have the resolution reinstated at our last annual meeting. However, it will be voted in at our May Bd of Directors meeting.

The reasons the NvCA opposes the project are:

1) The project fails to protect the historically decreed water rights of the water users on the river.

2) The cost of the project far exceeds it's benefits and is therefore inflationary in a time when inflation is the most serious threat to our American economy and way of life.

3) There is no ecological justification for the project.

4) Federal funding for the project would invite Federal interference in Nevada Water administration.

I hope you will convey these concerns to our Congressional Delegation.

Sincerely,

Paul Bottari

Paul D. Bottari, Executive Secretary
Nevada Cattlemen's Association

STATEMENT OF CHARLES WHITE, EXECUTIVE VICE PRESIDENT, NEVADA FARM BUREAU FEDERATION

The Nevada Farm Bureau Federation is the largest general farm and ranch organization in Nevada, with over 5,000 member families throughout the state. Farm Bureau policy is developed through a process that originates with the individual farmer or rancher. This policy is then approved at the county, state and national levels, depending on its county, state or national impact.

At the annual Nevada Farm Bureau Federation House of Delegates meeting in 1979, the following policy was adopted:

> HUMBOLDT RIVER PROJECT
>
> We oppose construction of the flood control project for the Humboldt River and tributaries as presently proposed by the U.S. Army Corps of Engineers. This opposition results from the following facts:
>
> 1. The project, as presently proposed, would fail to protect the historically decreed water rights of the water users on the river.
> 2. The operation of the project reservoirs would directly and adversely affect agricultural intersts in Elko, Eureka, Lander, Humboldt and Pershing Counties.
> 3. Economic evaluation of the project using modern criteria shows that the estimated costs far exceed the projected benefits and that an expenditure of funds for construction of the Humboldt River Project would be inflationary at a time when inflation is the most serious threat to our Americam economy and way of life.
> 4. There is no ecological justification for the project.
> 5. Federal funding for the project would invite Federal interference in Nevada water administration.

I hope Nevada Farm Bureau's policy will be of use to you. Please contact me again if you need more information.

GARRISON DIVERSION UNIT, NORTH DAKOTA—OPPOSITION

STATEMENT OF RICHARD MADSON, NATIONAL AUDUBON SOCIETY

ACCOMPANIED BY:

ONNO KREMERS, CANADIAN REPRESENTATIVE
ERVIN BOESE, FARMER
ORVAL C. HOVEY, COMMITTEE TO SAVE NORTH DAKOTA
RICHARD STEINBACH, NEW ROCKFORD CANAL PROTESTORS ASSOCIATION

Chairman HATFIELD. Now, I would invite the panel in opposition to the Garrison diversion unit to come forward. I believe there are five members of this panel. Let me caution again the first speaker not to take all the time, because if you want everyone to be heard, you have a limited time to make your presentation. I would urge you to be considerate of each other.

I would also like to say we read well here on this committee. I would prefer you give the highlight in an oral way rather than just reading a prepared statement.

Mr. MADSON. I am Richard Madson, Mr. Chairman. I reside in Jamestown, N. Dak. I am the North-Midwest regional representative for the National Audubon Society.

In accordance with your remarks on keeping within the time schedule, we have to keep five witnesses within 15 minutes, which may be almost as difficult as trying to balance the Federal budget. But I will allocate my time to the individuals here. We do have, Senator Hatfield, an international delegation. I want to make sure you have time, particularly, for our good neighbor from Canada to be heard.

Our first witness is the chairman of the New Rockford Canal Protestors Association, Mr. Richard Steinbach.

Mr. STEINBACH. Mr. Chairman, I am Richard Steinbach from New Rockford. I am a lifelong resident and farmer in Eddy County. I wish to thank you for the permission to testify here today. I request that my remarks and prepared statement be included in the hearing record.

Chairman HATFIELD. They will be, Mr. Steinbach.

Mr. STEINBACH. I will attempt to paraphrase my written testimony.

We are opposed to the Garrison diversion project because of the tremendous cost. It was initially authorized at $212 million. The Water and Power Services estimates that the present completed cost would be over $1 billion. This represents an irrigation investment of $3,320 per acre.

We believe there are also engineering problems. The McClusky Canal was constructed with a 2-to-1 slope, which has resulted in severe slumps. There have been repairs made which have cost in the neighborhood of $4 to $6 million. In addition to slumps, when there is water put in the canal, seepage occurs. There are at least three farmers in the area of the canal near Lake Audubon who are suffering seepage problems. Water from the canal is spreading out over the private land.

Also, the Bureau of Reclamation installed test wells some years ago. In these wells the water level is rising at a rate of about a foot per year. Presently the water level is within 1 foot of the surface. One farmer in this area has land which the surface would be 17 feet below the proposed operating level of the canal, and the canal isn't even full now. So we believe that is going to present a serious problem.

Water and Power Resources Service estimates that 40 percent of the water which leaves the Snake Creek plant will be lost through evaporation and seepage. Also, 500 megawatts of power will be used and lost because of the project.

North Dakota at present has very good, dry-land agriculture and leads the Nation in the production of spring wheat, durham, and sunflowers. The 250-acre project is only six-tenths of 1 percent of the cropland in the State, and with future dry years, even should the project be completed, this means that 95 percent of the State's farmers will go through future dry years just as in the past.

We also believe remedial legislation or administrative changes are needed because some of the land purchased for the Lonetree Reservoir over 8 years ago has been leased to former owners who wish to have it. However, after 8 years the Government proposes to lease this land on a bid basis. This will result in large farmers being able to bid up the price. Thank you.

Chairman HATFIELD. Thank you, Mr. Steinbach.

Mr. MADSON. Mr. Chairman, our next witness is Orval Hovey from the Committee To Save North Dakota.

Mr. HOVEY. Mr. Chairman, I am also a farmer involved in the project. I am going to summarize my statement very quickly.

One thing I would like to bring to the attention of the committee—first, I want to personally thank you for the opportunity to appear before the committee. I wish my testimony to be included in the record.

Chairman HATFIELD. We are glad to have you here.

Mr. HOVEY. The first thing I would like to say is the overall cost of providing this from the standpoint of the United States is the project will cost approximately $15 million for every man, woman, and child. They think this project is going to benefit about 1,500 farmers and for one-quarter of the land. The irrigation thing is subject to the tune of about half a million dollars.

I think, with projects sponsored by the Government, there should be a reasonable chance these projects be paid by the users.

CANADIAN OPPOSITION

I maintain that the project can be—if needed agriculture production is needed in the country—that the Garrison project could still be constructed. Just recently one of the main purposes of my appearing here—and I would like to remind the committee again that the Canadian Parliament and the House of Commons has voted unanimously, and the Manitoba Parliament also has voted unanimously, to request their Government to express their concerns about the effect of the project on Canada. Seventy-five percent of the project drains into Canada. Their main concern is the transfer of the water from the Missouri River basin into the Hudson drainage area.

Also, people in South Dakota along the James River just recently filed suit to halt their part in the drainage, which is approximately 25 percent of all construction proposed on the Oakes pumping plant. Just last Saturday they had a big debate for 90 minutes on public television in North Dakota. Members of the panel consisted of the former Governor, William Guy; manager of the Garrison District, Wilber Engeldorf; and people who opposed the project were Dr. Harry Garrison and deputy administrator of resources for Manitoba, Jack Minorty. During the program and after the program the station requested that the people call in and express their concern one way or the other. Although a poll of this type is not considered a reliable poll, it does give you an indication of the feeling of the people. In North Dakota there were 296 people for and 450 against, about a 40–60 percent measure. Thank you very much for your time.

Chairman HATFIELD. Thank you for your testimony. Tell my good friend Governor Guy hello when you see him.

Mr. HOVEY. I sure will.

Mr. MADSON. Mr. Chairman, our next witness is Ervin Boese, also a member of the New Rockford Canal Protestors Association and landowner who has had some of his land condemned for a project that we feel cannot be constructed.

Mr. BOESE. I want to thank the chairman for granting us permission to testify. I hope that my remarks and testimony can be included in the hearing record.

Mr. Chairman and members of the committee, my name is Ervin Boese from Manfred, N. Dak. I farm in the proposed New Rockford Canal area. Condemnation of a parcel of my land has split my farming unit into two parts.

I am appearing to request zero funding for the Garrison diversion project. At a time when our Government is trying to cut spending, I feel that a project such as this, where the costs are constantly rising and the benefits are doubtful, is a good place to start.

This project requires 220,000 acres to be taken so that 250,000 acres can be irrigated. It is approximately 15-percent complete, with over 165,000 acres of land yet to be acquired. Plan 3 in the impact statement calls for a pipeline instead of Lonetree Reservoir and the New Rockford Canal. I think this plan merits study and consideration. I am not opposed to irrigation and municipal water, but I am against having prime farmland used for canals and wildlife.

At one time I favored the Garrison diversion unit and lobbied with the Farmers Union for the project. In the early sixties, North Dakota State Representative Nygard told us that this project was not good for our State. That really made me think, as opposition at that time was unheard of.

My opinion changed as the facts of Garrison became known. Years ago it was portrayed as a river project. We were not told that good farmland was going to be taken for mitigation, canals, and a reservoir.

Public opinion is changing as people become more knowledgeable about the project. A district court judge has ruled that Barnes County, N. Dak. may pull out of the Garrison Diversion Conservancy District. Wells County, which is where I live, is, at present, trying to pull out of the district. Approximately 90 percent of the rural people recently contacted are against the Garrison diversion project.

I have been township clerk for 31 years. My land was the first to be listed in our tax book as "U.S.A., tax exempt." I am wondering what that book will look like if the New Rockford Canal is built and all that land comes off the tax roll. I was shocked as I looked through a neighboring township's tax book and saw parcel after parcel of land listed "U.S.A., tax exempt." I am also on the Harvey, N. Dak., school board. With all the land that Garrison will take, I am wondering where will the money come from that we need to gravel our roads and maintain our schools?

We also need to consider the objections of our South Dakota and Canadian friends to the project. So once again, I am asking you to help our Government save money and land by not appropriating any funds for the Garrison diversion project.

Thank you.

Mr. Chairman, I would ask that, how would you feel if your land was scheduled to be taken and the project was never completed? For those reasons, I hope you will consider and recommend zero funding for the Garrison diversion unit. Thank you, Mr. Chairman.

Chairman HATFIELD. Thank you, Mr. Boese.

Mr. MADSON. Mr. Chairman, our final witness is a guest from Canada. He is a resident of Winnipeg, Manitoba, and represents 18 different Canadian organizations here today, Mr. Onno Kremers.

Mr. KREMERS. Mr. Chairman, my name is Onno Kremers. I am a Canadian citizen residing in Winnipeg, Manitoba. As Mr. Madson mentioned, on behalf of the 18 organizations I represent here today, with a combined membership of over 750,000 individuals, I would like to sincerely thank you for the opportunity to testify before this committee. Like my other panel members, I ask that my remarks and my prepared statement and supporting letters be included in your hearing record.

Chairman HATFIELD. They will be.

Mr. KREMERS. Mr. Chairman, before addressing the issue before this committee, I would like to say that I and my fellow citizens deeply regret the injury to your President and join with you in prayers for his speedy recovery.

Chairman HATFIELD. Thank you very much. You are very thoughtful.

CANADIAN OPPOSITION

Mr. KREMERS. Mr. Chairman, the Garrison diversion project in North Dakota has evolved into a major point of contention between my Government and yours. It was on the agenda several weeks ago when President Reagan met with Prime Minister Trudeau and was recently the subject of a unanimous resolution from our House of Commons, expressing opposition to further funding for the project until the Canadian concerns over the project have been resolved.

The Garrison issue has also been the subject of an intensive investigation by the highest authority established to investigate interboundary water disputes between our two Nations—the United States/Canadian International Joint Commission. The final report of this committee on the Garrison issue, released in September 1977, concluded that the project "would cause significant injury to health and property in Canada as a result of adverse impacts on the water quality and on some of the more important biological resources in Manitoba." This would constitute a violation of the Boundary Waters Treaty between our two Nations.

The report stressed that the potential harmful impact of the transfer, via project waterways, of harmful rough fish, fish diseases, and fish parasites to our Hudson Bay watershed would be irreversible and would threaten the very fishery in Lake Winnipeg and Lake Manitoba, an area of over 11,000 square miles which comprises one of the largest inland commercial fisheries in Canada.

I personally direct a private consulting firm that has investigated in detail what such degradation would mean to the citizens and economic welfare of Canada, and I would like to relate those potential damages to you—as the fate of our fishery, with related, very significant implications for relations between our two Nations, lies in your hands.

In the area that will be affected by the project, the commercial fishery employs over 3,000 workers directly engaged in the industry. In addition, there are many workers indirectly employed in fishing activities—for instance, in the transport of fish by vessel, truck, or aircraft; in the processing, marketing, distribution, and export of fish to U.S. markets, I might add.

Sports fishing is also an important activity carried out on the lakes which will be affected by the project and supports a $90 million tourist industry in Manitoba. Fish also comprise an important nutrient element in the diet of some 17,000 treaty Indians in the area to be impacted. By the time full impacts of the project are expected, these Indian people will be consuming a million pounds of fish annually.

In 1979, the sales value of commercial species which will be affected by Garrison was some $22 million alone. The introduction of foreign fish species as a result of the project will result in the reduction, by 50 to 75 percent, of such commercial species as lake whitefish, sauger, and walleye in Lakes Winnipeg and Manitoba. My studies have concluded that population losses of 54 percent or greater will result in a 100-percent loss of revenue, and hence, the entire collapse of the fishery.

Mr. Chairman, when one takes into account the losses in the secondary employment sectors, the losses in the capital investment in the fishing fleet and equipment, the increase in Government transfer payments that would inevitably have to occur in the numerous small communities and large towns whose sole livelihood in many cases depends entirely on the fishery, the loss in the thriving tourist industry, the cost of replacing nutrients which will be lost to the thousands of Indian families who now depend on substance fishing for a major part of their diet, the cost of additional water treatment for those towns and municipalities who now draw their supplies from the rivers and lakes which will be affected by Garrison, then, Mr. Chairman, it is evident that total losses to Manitoba over the life of the project will be in the order of hundreds of millions of dollars.

My studies alone, conducted for the native fishery, which represents only a third of the entire fishery, have estimated direct, future losses to these fishermen to range between $48 and $218 million.

Current project cost is estimated at over $1 billion. This figure does not take into account potential Canadian damages as a result of the project. Governor Olson of North Dakota told this committee last week that for his State, the project's benefits will far outweigh its costs. Be that as it may, Mr. Chairman, I am sure that the Governor did not take into account the losses to Canada I have just outlined. Does it really make any economic sense to continue constructing a project when the cost of damages to Canada, which may, by themselves, approach one-half of the total project costs, has not been taken into account?

Even if this committee were to consider compensation for Canadian damages as a result of this project, the problem still remains that we, as Manitobans, have always maintained that compensation is not an acceptable solution.

ENVIRONMENTAL IMPACTS

Mr. Chairman, the Garrison diversion project is only 15 percent complete, but it has, nevertheless, advanced to the point where irreversible damage to Canada is imminent. Lonetree Reservoir, the New Rockford Canal, and the Oakes pumping plant—as authorized—are not acceptable to my country because they are part of a plan to link your watershed with ours. Our way of life, which we value as much as any of your citizens do theirs, depends on avoiding that linkage.

Canada first protested the Garrison diversion unit through diplomatic channels a full decade ago. The final report of the International Joint Commission has been available since 1977. The position of our citizens, our Provincial government, and our Federal Government is clear—you must abide by the Boundary Waters Treaty.

We very much value the friendship of your Government and hope you value ours. If you do, you must stop construction of the Garrison diversion project. Until the project is redesigned in such a way as to protect our interests, we request zero funding for the project.

Thank you.

Chairman HATFIELD. Thank you, Mr. Kremers.

Mr. MADSON. Mr. Chairman, I have tried, in deference to your instructions, to keep our remarks very brief in our summary. I would ask again that all of the written statements furnished for the record be included in the hearing record. I will not even summarize the remarks that I have prepared, except to say that I think there is some good news on the horizon for the controversy that surrounds the Garrison unit in that in North Dakota there is more and more acceptance, I believe, of the idea of moving in the direction that South Dakota apparently will go in the controversy over the Oahe project. In other words, we are beginning to look more toward varied pipeline alternatives that would supply municipal water supplies and water for rural water districts without creating the international, social, and environmental havoc that is the case with the authorized Garrison unit.

All of the groups represented here today would request zero funding for the Garrison project and would hope in the future in North Dakota we might move toward meeting some of our legitimate water needs with the alternative of varied pipeline delivery systems.

I would also like to say, in closing, Senator Hatfield, that in the many years I have appeared before this committee, and the other individuals concerned with the Garrison issue, I have greatly appreciated the time and attention you have paid to our concerns. We feel the opportunity to testify before this committee is a very important part of the democratic process. We thank you for the time you have given us here today.

Chairman HATFIELD. Thank you, Mr. Madson. You orchestrated the testimony very well this morning.

[The statements follow:]

STATEMENT OF RICHARD MADSON, NORTH MIDWEST REGIONAL REPRESENTATIVE, NATIONAL AUDUBON SOCIETY

SUMMARY

The Garrison Diversion Unit in North Dakota is one of the most controversial water development projects on the North American Continent. It is opposed by the Government of Canada, by the national conservation community, and by a growing number of landowners in North and South Dakota.

It is very likely that the project will never be finished. Most of the funds last appropriated for the project have not been spent, due to international objections from Canada, and pending litigation against the project.

According to the Department of the Interior's own data, projected benefits of the project have decreased by 45% in just the last two years, while the projected cost of the project has increased by 38% during the same period of time. In the last year, the projected total cost of the project (1.01 billion dollars) has increased by more ($183 million) than all the funds expended on the project since authorization in 1965 ($157 million). The direct benefit-cost ratio for Garrison, according to Interior's own data, has now fallen to 1.1 to 1, and Interior also admits that projected costs are rising faster than projected benefits--placing the American taxpayer on an ever-speeding treadmill.

Potential alternatives to the authorized project would involve buried pipelines for municipal and rural water supply. They would meet legitimate water needs in North Dakota, without the international, environmental and social havoc the present project has created. These potential alternatives will likely never be realized, however, so long as Congress keeps pouring taxpayer's funds down the Garrison drain.

Continued construction on the authorized project, as requested by North Dakota's delegation, will violate promises our nation has given Canada. It will involve taking land from farmers via condemnation, some of which has been in one family since it was homesteaded, for project features which likely will never be used because of international objections to the project. Further appropriation of funds for the authorized project will simply involve stockpiling additional new funds behind FY 80's remaining unspent funds--and would show blatent disregard for the fiscal responsiblity that taxpayers demanded via last November's elections.

Not another dollar of taxpayer's funds should be wasted on this classic boondoggle. Congress should respect our treaty obligations to Canada, recognize that alternatives may exist for meeting legitimate water needs in North Dakota, and begin feasibility studies on those pipeline alternatives with existing, unspent funds previously appropriated for the Garrison Unit.

My name is Richard Madson, I reside in Jamestown, North Dakota, and I serve as North Midwest Regional Representative for the National Audubon Society. On behalf of the members of the Society, I would like to thank you for the opportunity to testify before you here today. With the Chairman's permission, I would ask that my comments and prepared testimony be included in the Hearing Record.

In November of last year this nation's electorate went to the polls and charged those with responsibility for spending tax dollars to listen carefully to those from whom tax dollars are collected.

Fiscal responsibility wasn't just another election slogan, it became a mandate given a new segment of the political spectrum by voters convinced that federal spending was getting out of hand.

It now is understood in Washington, D.C. that cutting federal spending is a cornerstone of the philosophy via which any elected individual might hope to someday be elected again.

Thus it is that virtually every political request for additional porkbarrel spending is now prefaced with the statement: "While I understand that spending must be controlled..."

Unfortunately, all that appears to have been understood by some politicians is that lip service must be paid to the appearance of fiscal restraint. What isn't understood by those individuals is that last November the public really meant it--federal spending is getting out of hand--and taxpayers want such spending curtailed.

On Monday, March 23, 1981, North Dakota's Congressional Delegation went on record requesting additional taxpayer's funds for construction of the Garrison Diversion Unit, one of the most, if not the most, controversial water project on this continent. Those funds, if granted, would not be taken just from the pockets of North Dakota taxpayers, of course, but from the collective pocket of all American taxpayers, who are becoming increasingly exasperated as they become increasingly broke.

In past years, such support from a state's Congressional delegation would have settled the issue, at least before this committee, at least in my opinion. For I assume that you assume if a politician supports a given water project, he does so from a safe political base, consisting of an electorate who demand fiscal responsibility in every District but their own. In other words, stop wasting my tax dollar, unless you are wasting it on me...

Such it has often been, at least during the decade in which I have closely followed water project appropriations. Possibly, however, the Spirit of November still lurks in the countryside, ready to reward those who practice fiscal restraint in any District, and ready to haunt, come the elections of autumn, those who don't.

With that hope I raise the Garrison issue as a national litmus test of the ability of this Congress to practice fiscal responsibility.

Given a federal debt approaching $985 billion dollars, I suppose the $4 million requested by the Reagan Administration for Garrison, and the additional $7 million requested by the North Dakota Delegation, somewhat pale in comparison.

Using my late grandfather's advice that one could eventually save dollars by saving enough pennies, I expect, however, that one could extrapolate a theory by which Congress can eventually waste billions by wasting a few millions at a time.

I contend that appropriating additional tax monies for the Garrison Diversion Unit is an incredible waste of money, and I defend my contention with the following:

1. Previously appropriated money hasn't been spent.

   There were no funds requested for the Garrison Unit in the FY 81 budget. However, North Dakota's delegation successfully obtained $12.7 million through the FY 80 Supplemental Appropriations Act, by adding an amendment to the legislation that provided emergency funding to the victims of the Mt. Saint Helens disaster. Most of that money has still not been spent, because construction features planned (i.e. Lonetree Reservoir and the New Rockford Canal) are objected to by Canada. With many federal programs now being cut, why dump extra funds behind a project that can't spend what it already has?

2. International objections will likely cut 79% of authorized project.

   In 1977 the International Joint Commission released its Final Report on the Garrison Unit. The report concluded that the authorized project "would cause significant injury to health and property in Canada as a result of adverse impacts on the water quality and on some of the more important biological resources in Manitoba" (IJC/FR p. 105)--this would involve a violation of the 1909 Boundary Waters Treaty between the United States and Canada. The IJC recommended that portions of the project affecting Canada "not be built at this time" (IJC/FR p. 121)--this would effectively preclude development of 79% of the authorized project. Garrison was one of the issues Canadian Prime Minister Trudeau raised in his recent meeting with President Reagan. We cannot build the authorized project while keeping our treaty obligations to Canada. Why fuel the controversy that the project has already caused between our two nations by placing yet more construction funds in the budget?

3. Project costs are skyrocketing, benefits are falling sharply.

   The Department of the Interior's own documents now indicate that the projected benefits of the project have decreased by 45% in just the past two years, while projected costs have increased by 38% during the same period. The project's direct benefit-cost ratio now stands at 1.1 to 1, barely above unity. The project is only 15% complete, and the Interior Department concluded this year that projected costs are now rising faster than projected benefits--

placing the American taxpayer on an ever-speeding treadmill. In just the past year, the projected completion cost of the project (now 1.01 billion dollars and rising) has risen more (183 million dollars) than all money spent to date on the project since authorization (157 million dollars).

4. The projects irrigation subsidy exceeds $600,000 per farm.

   Assuming that 1300 farmers will irrigate via Garrison waters (a promotional claim that promoters have been unable to substantiate) the cost to the American taxpayer to bring water to each farm is now $638,000 per farm, or $3,320 per acre. North Dakota farmers irrigating with the project will repay less than 3¢ of every dollar the taxpayers spend providing them with irrigation water. Promoters claim that most remaining costs will be paid through sale of Missouri River Basin electrical power. However, Nebraska economist Bruce B. Johnson has concluded that such repayment claims are greatly distorted. He further concluded, after an analysis of accounting and repayment provisions of the Pick-Sloan Missouri Basin Program: "The point is clear--any inference that the direct beneficiaries of Federal irrigation development are making more than a token repayment borders on fraud." With my testimony I am submitting a copy of Dr. Johnson's paper for the record. With the public being asked in many programs to tighten their economic belt, why give a relative handful of individuals such an incredible subsidy?

5. The project takes too much productive land.

   The authorized Garrison Diversion Unit will irrigate, at a cost of over one billion dollars, 250,000 acres of already-productive land, which involves 6/10ths of 1% of the agricultural land in North Dakota. All project features, however, including reservoirs, canals, laterals, mitigation, etc., will necessitate the acquisition of 220,000 acres of land, most of which is now in agricultural production. In the past year, one county (Barnes) successfully sued the Garrison Diversion Conservancy District to be released from the District, as a result of concerns generated over acreages of mitigation lands that would have been acquired in the county. A similar effort to leave the Conservancy District is now underway in Wells county, and I predict that more counties will follow suit. Why spend a billion dollars on a project that takes almost as much land as it benefits?

6. "Phased development" is not viable.

   After claiming for years that the project would not harm Canada, promoters were stunned after the final report of the International Joint Commission was released. Rather than admit the report spelled the end for the project, at least if the United States intended to keep treaty commitments to Canada, promoters decided that "phased development" was in order. Let it suffice to say that all three general irrigation areas for the project (Souris, Central North Dakota, and LaMoure-Oakes) would involve the type of connection with the Hudson Bay watershed that the IJC said must "be prevented at all costs."

Improved water supplies for cities and rural water districts would be of value in North Dakota. Were water supplied for such uses from the Missouri River via a series of buried pipelines, most of the objections to the current project would likely be eliminated. Existing project funds should be redirected into the study of such alternatives.

[From the Water Resources Bulletin, February 1981]

ACCOUNTING AND REPAYMENT PROVISIONS OF THE PICK-SLOAN MISSOURI BASIN PROGRAM[1]

(By Bruce B. Johnson)[2]

ABSTRACT. The accounting and repayment practices employed by the Water and Power Resources Service (WPRS) greatly distort the actual resource allocation process and the ultimate repayment to the Federal Treasury. Through a series of transfers of capital repayment obligations to future development with modest or no interest charges, the repayment is reduced to only a fraction of the amount implied. In the case of the Pick-Sloan Missouri Basin Program, the public subsidy of hydroelectric power is estimated to be $2 for every $1 of repayment. For irrigation investment, the direct repayment to the Federal Treasury is less than 10 percent of the annualized cost of the public investment, with irrigators repaying at a rate of less than $0.03 for every dollar of public expenditure.

(KEY TERMS: accounting, repayment; water projects; Pick-Sloan.)

INTRODUCTION

A 1978 study by the U.S. Department of Interior's Office of Audit and Investigation was highly critical of the accounting and repayment practices used by their sister agency, the Water and Power Resources Service (formerly the Bureau of Reclamation). In discussing the water development programs involving power generation and irrigation facilities, numerous concerns regarding payback provisions were raised. Referring specifically to the Pick-Sloan Missouri Basin Program the report stated:

> "The financial posture of Pick-Sloan is, at best, based on an uncertainty. At worst, it is based on an unreality" (Office of Audit and Investigation, 1978, p. 7).

It concluded that the current financial management is totally inadequate for multibillion dollar investments of this type.

Earlier studies have also been critical of the accounting framework used by the Water and Power Resources Service (WPRS). Nearly three decades ago, the Missouri Basin Survey Commission concluded that improvements were needed in the financial and accounting practices associated with large scale resource development programs (Missouri Basin Survey Commission, 1953, p. 21).

More recently, North and Neely (1977) have discussed the evolution of water resource projects from single purpose to multiple objectives which has led to the dispersal of water project benefits across a growing body of interests in both the public and private sectors. The result, according to these authors, has been the development of a series of enormously complex and inconsistent cost sharing arrangements.

Several current issues imply the need to evaluate the present accounting framework in greater detail. First, the apparent repayment of public investment in numerous proposed irrigation projects, authorized and unauthorized, is one factor. A major portion of Federal Treasury monies allocated to such projects is supposedly repaid from hydroelectric power revenues generated by the total water development program. The relative merits of such irrigation project proposals may well be enhanced since the policy maker and the constituency he/she represents tend to view the Federal outlay more as a loan than as a direct subsidy. The statement of repayment provisions is clearly communicated to Congress in deliberations for initial project authorization and in all subsequent budget requests. Typically, a total repayment schedule of irrigation investment is presented with a specified portion allocated to the irrigators and the remainder to power revenues (for example, see WPRS, pg. 1).

A second issue adding impetus to such a review is the current state of energy resources. With various energy supplies becoming increasingly scarce and costly, the efficient allocation and marketing of hydroelectric power from public water projects becomes increasingly important (Young, 1978). Realistic pricing of such power, reflecting associated costs, is crucial to effective management.

Finally, the contemporary mood for greater fiscal accountability within the public sector would suggest the need for more thorough understanding and general agreement with regard to the allocation of public revenues for water development programs. As noted by Libby (1978) there is increasing pressure for systematic measurement of economic performance of natural resource programs.

The purpose of this paper is to focus on accounting provisions historically practiced by government agencies in multipurpose water development programs involving the generation of hydroelectric power. More specifically, the power repayment schedule for the Pick-Sloan Missouri Basin Program will be discussed. Key economic implications arising from this accounting framework will then be presented.

THE PICK-SLOAN MISSOURI BASIN PLAN

The Pick-Sloan Plan is a multiple purpose water resource development under cooperation of the federal government and the Missouri basin states. It consists of about 150 divisions and units serving flood control, irrigation, hydroelectric power production, navigation and other purposes along the main stem and the tributaries of the Missouri River. The area within the basin encompasses about one-fifth of the conterminous United States.

Authority for this development program is found in several Federal legislative acts since 1938. The most prominent is the Flood Control Act of 1944 in which the general comprehensive plans of development were set forth, and the initial stages approved and authorized.

The actual development of the Pick-Sloan system has been the major responsibility of the U.S. Army Corps of Engineers (Department of Defense) and the Water and Power Resources Service (Department of the Interior). Since October 1977, the Department of Energy has assumed the responsibility for transmission and marketing of commercial hydroelectric power. Prior to that time, this was the responsibility of the WPRS.

While plans for the completed system involve some 150 divisions and units, the system is far from the final stage of development. Most of the planned power generation facilities are currently in operation, while the majority of the proposed irrigation facilities are yet to be built. In fact, some of the planned irrigation development is scheduled for construction in the latter part of the 21st century. Obviously, projects planned for a century from now are not "authorized" by Congress, and a high degree of uncertainty must be attached.

According to the recent auditor's report, the cumulative Federal investment in the Pick-Sloan System was over $2.4 billion in 1976, of which nearly $2.0 billion was allocated to functions that are expected to repay those costs through power, irrigation, and municipal and industrial water revenues (Office of Audit and Investigation, 1978, pp. 3-4). By the year 2078, the expected investment in reimbursable functions repayable from power revenues is $5.8 billion. Of this amount, 54 percent is classified as aid to irrigation. At that point, the unpaid investment is expected to be $1.3 billion. Nearly all of this unpaid portion will be irrigation assistance. Repayment is scheduled for completion by the year 2152.

THE FINANCIAL MANAGEMENT SCHEME

Current Guidelines and Practices

The criteria for repaying the Federal investment in the Pick-Sloan program have never been clearly and comprehensively expressed by the Congress. Rather, guidelines have evolved through a series of legislative acts.

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[1] Paper No. 80126 of the *Water Resources Bulletin*. Discussions are open until October 1, 1981.

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The use of power revenues to repay irrigation costs, a key element of the program, is as old as the authority to sell power from the Federal reclamation projects (Missouri Basin Survey Commission, 1953). In 1906, Congress directed that revenues derived from power sales should be transferred to the reclamation fund and placed as credit of the project from which power is derived. Under the Flood Control Act of 1944, which instituted the Pick-Sloan Program, this policy was enacted, but with the provision that the whole river basin be managed as a single project account. The intent of Congress apparently was the use of net power revenues to meet other reimbursable costs beyond the ability of the irrigation water users to repay; although the method of implementation was unclear. Subsequent development of the repayment schedule took place in 1963 in a financial plan submitted as an appendix to the Garrison Unit proposal. This plan, which followed a period of increasing financial difficultires for the Pick-Sloan program, became the standing policy with the authorization of the Garrison Unit.

The general scheme for repayment of the Pick-Sloan system is as follows:

– Power revenues will repay the investment in power generation and transmission facilities, including replacements, within 50 years after completion of the specific power facility. The investment is to be repaid with interest (3 percent).

– Power revenues will repay a portion of irrigation facilities investment *without* interest. For irrigation units not under construction or operation prior to 1965, the repayment period is defined as 40 years plus a development period of up to 10 years after the irrigation facility becomes benefit producing.

– Users of municipal and industrial water are required to repay the investment allocation with interest.

– Federal investment in other purposes, such as navigation, flood control, recreation, fish and wildlife, and roads, is not considered reimbursable.

Of key importance is the provision for repayment of the major portion of irrigation development from power revenues. WPRS estimates that power revenues will repay in excess of 80 percent of the total cost allocated to these facilities. Under these guidelines, the power from the system is to be marketed at the lowest possible rates so as to encourage widespread use, and still be consistent with sound business principles (Office of Audit and Investigation, 1978).

Inherent Problems

Two aspects of the repayment scheme are suspect in terms of sound business principles: 1) the use of an "ultimate development" repayment period and the associated transferability of interest bearing to noninterest bearing repayment obligations; and 2) the employment of low interest charges on the interest bearing repayment obligations.

The "ultimate development" concept implies the repayment schedule is not itemized on a unit by unit basis. No complete repayment schedule is associated with each facility. Rather, portions of a specific capital investment may be [illegible] to future projected development many years [illegible] In fact, repayment of the Pick-Sloan Program is currently projected well into the 22nd century. In other words, a significant portion of repayment may be delayed indefinitely, if not permanently.

To illustrate, consider the following. A facility is constructed largely for power generation. However, it is assumed that irrigation facilities yet to be built will use some power; therefore, part of the power investment is suballocated to irrigation pumping power. The payback to the Federal treasury of this portion is therefore delayed until the irrigation unit is developed. As pointed out by the 1978 auditor's report of the Pick-Sloan system, this suballocation within the ultimate development time frame can substantially affect repayment – especially since the bulk of irrigation facilities are scheduled to come "on line" between the years, 2001 and 2077. Given the standard 50-year repayment period on irrigation facilities with no interest charged, the portion of power revenues allocated to future irrigation pumping needs is an interest free obligation with payment of principal not completed until the year 2137. Thus, in terms of repayment to the Federal treasury, this obligation is virtually nullified. Even at a discount rate of 9 percent, the present worth of $1.00 due 50 years from today is only $0.01.

Of the capital investment in projects generating hydroelectric power in the Pick-Sloan system, about 17 percent has been suballocated to future irrigation development on the premise that this portion of the power will be required to deliver irrigation water to the proposed projects. Currently, this suballocation of existing federal investment exceeds $170 million.

The same assumption regarding ultimate development is used to assign to irrigation a portion of annual operating and maintenance (O&M) expenses of on-line power facilities, even though these expenses may not be related to any current irrigation operations. In turn, this portion is classified by the repayment structure as totally nonreimbursable and will never be repaid to the Federal treasury.

For reasons argued historically by economists, the rate charged on interest bearing obligations should theoretically represent the opportunity cost of keeping money in the private sector. As stated by Baumol (1970) use of a lower discount rate results in the misallocation of resources between the private and the public sectors. The maximum interest rate of 3 percent employed in the Pick-Sloan account is certainly far below that of the private sector. Consequently, the time repayment to the Federal Treasury is a fraction of the stated amount.

SUMMARY AND IMPLICATIONS

The ultimate repayment to the Federal treasury of *part* of the frontloaded public investment in water development is an established principle. Those components, which generate tangible returns to definable elements of the population, are generally classified as reimbursable. These features directly [illegible] However, as suggested by this analysis of the Pick-Sloan system, the terms "reimbursable" and "repayment" imply meaning quite different from conventional financing nomenclature. The financial accounting provisions used by the WPRS for this major water development program do *not* incorporate the element of time in a fashion which provides for realistic recovery of capital costs associated with power generating facilities. Also, irrigation development is considered in essentially a timeless dimension (zero interest rate) such that repayment to the Federal Treasury is nonexistant. The end result is that the financial accounts distort significantly the actual resource allocation process. Hydroelectric power rate schedules for these public facilities in no way reflect the associated costs, nor is the magnitude of Federal subsidy of water development recognizable.

The specific dollar magnitude of public subsidy associated with this development program is difficult to ascertain. However, the following comparative analysis provides some basis of estimation. Consider first the repayment on power facilities. As now structured within the Pick-Sloan repayment scheme, the capital investment is to be repaid with interest (3 percent or less), within 50 years of completion. As pointed out, however, some of this investment (an average of 17 percent) is suballocated to future irrigation on a noninterest bearing basis. In effect, this results in automatically ignoring 17 percent of the cost of the facility. Given a $100 million project, with a 3 percent interest charge on $83 million ($100 million less 17 percent) the annual repayment to the Federal Treasury is about $3.2 million. In contrast, a more conventional 50-year repayment schedule at 9 percent interest for the full capital investment would result in an annual repayment obligation of $9.1 million – nearly 3 times as great. One must conclude, the actual repayment on the power facilities as implied by the Pick-Sloan system is not in full; rather it represents a public subsidy of $2 for every $1 of repayment. Accordingly, the wholesale rate structure on the power sold by the Pick-Sloan system is artifically low. What follows then, is an economic incentive for power consumers to overuse energy in today's environment dictating energy conservation.

In the case of irrigation investment the repayment implication is even more grossly misrepresented. Under present criteria, the principal is paid off by power revenues (roughly 75 percent) and project irrigators (roughly 25 percent) over a 40-year period beginning 10 years after the first season of water delivery. Since the financial obligation of irrigation development is interest free, the annual repayment on a $100 million irrigation project is $2.5 million per year over the 40-year repayment period, or an average of $2.0 million per year over the full 50-year time period. Under conventional financing, one would need to account for the buildup of principal during the first 10 years as well as assign an appropriate interest rate reflecting the time dimension of capital usage. Under these provisions the $100 million would compound to $237 million in 10 years at a 9 percent rate of growth. Thus, at the beginning of the repayment period, the repayment obligation would be $237 million. Assuming a 9 percent interest rate, the amortized interest and principal payment would be $21.9 million annually. In other words, the direct repayment to the Federal Treasury would actually be less than *10 percent* of the annualized cost of the public investment. The Federal irrigation subsidy exceeds, by nearly 10 times, the actual dollar repayment made by irrigators and power users. In fact, irrigators, the primary recipients of project benefits, are obligated to repay at a rate of less than $0.03 on every dollar of public expenditure. The point is clear – any inference that the direct beneficiaries of Federal irrigation development are making more than token repayment borders on fraud.

In summary, the commitment of massive levels of public expenditures and natural resources to water development programs such as the Pick-Sloan System requires effective financial management and sound accounting principles. Unfortunately, the procedures now employed greatly distort the economic connotations involved. A thorough restructuring of these accounting and repayment provisions is of highest priority. Without an accurate and widespread awareness of the magnitude of Federal obligation associated with public water development, responsible policy decisionmaking will remain elusive.

Statement of Onno Kremers, Citizen of Canada, Representing the Union of Manitoba Municipalities, Manitoba Women's Institute, Regional Development Corporations for East Man, Interlake, Central Plains, Pembina Valley, Parkland and Norman, Tourism Industry Association of Manitoba, Lake Manitoba Commercial Fisherman's Association, Manitoba Fisherman's Cooperative, Northern Association of Community Councils, Four Nations Confederacy, Manitoba Federation of Labour, Lower Red River Valley Water Control Commission, Manitoba Naturalists, Southwest Heritage Protection Association, and Manitoba Branch–Canadian Water Resources Association

My name is Onno Kremers, I am a Canadian citizen residing in Winnipeg, Manitoba. On behalf of the 18 organizations I represent here today, with a combined membership of over 750,000 individuals, I would like to sincerely thank you for the opportunity to testify before your committee. I would ask that my remarks, prepared statement, and supporting letters be included in the Hearing Record.

Mr. Chairman, before addressing the issue before this committee, I would like to say that I and my fellow citizens deeply regret the injury to your President, and join with you in prayers for his speedy recovery.

Mr. Chairman, the Garrison Diversion Project in North Dakota has evolved into a major point of contention between my government and yours. It was on the agenda several weeks ago when President Reagan met with Prime Minister Trudeau, and was recently the subject of a unanimous resolution from our national House of Commons, which corresponds to your national House of Representatives, expressing opposition to further funding for the project until the Canadian concerns over the project have been resolved.

The Garrison issue has also been the subject of an intensive investigation by the highest authority established to investigate interboundry water disputes between our two nations - the U.S./Canadian International Joint Commission. The Final Report of this commission on the Garrison issue, released in September of 1977, concluded that the project:"would cause significant to health and property in Canada as a result of adverse impacts on the water quality and on some of the more important biological resources in Manitoba." This would constitute a violation of the Boundary Waters Treaty between our two nations.

The report stressed that the potential harmful impact of the transfer, via project waterways, of harmful rough fish, fish diseases and fish parasites to our Hudson Bay Watershed would be irreversible, and would threaten the very fishery in Lake Winnipeg and Lake Manitoba -- an area of over 11,000 square miles which comprises one of the largest inland commercial fisheries in Canada.

I direct a private consulting firm that has investigated in detail what such degradation would mean to the citizens and economic welfare of Canada, and I would like to relate those potential damages to you - as the fate of our fishery, with related very significant implications for relations between our two nations, lies in your hands.

In the area that will be affectedby the project, the commercial fishery employs over 3,000 workers directly engaged in the industry.

In addition, there are many workers indirectly employed in fishing activities, for instance in the transport of fish by vessel, truck, or aircraft; in the processing, marketing, distribution and export of fish to U.S. markets.

Sports fishing is also an important activity carried out on the lakes which will be affected by the project, and supports a $90 million dollar tourist industry in Manitoba. Fish also comprise an important nutrient element in the diet of some 17,000 Treaty Indians in the area to be impacted. By the time full impacts of the project are expected, these Indians will be consuming a million pounds of fish annually.

In 1979 the sales value of commercial species which will be affected by Garrison Diversion was some $22 million dollars alone. The introduction of foreign fish species as a result of the project will result in the reduction, by 50 to 75%, of such commercial species as Lake Whitefish, Sauger and Walleye in Lakes Winnipeg and Manitoba. My studies have concluded that population losses of 54% or greater will result in a 100% loss of revenue, and hence, the entire collapse of the fishery.

When one takes into account the losses in the secondary employment sectors, the losses in the capital investment in the fishing fleet and equipment, the increase in government transfer payments that would inevitably have to occur in the numerous small communities and large towns whose sole livelihood in many cases depend entirely on the fishery, the loss in the thriving tourist industry which depends to a great degree on sports fishing, the cost of replacing nutrients which will be lost to the thousands of Indian families who now depend on substance fishing for a major part of their diet, the cost of additional water treatment for those towns and municipalities who now draw their supplies from the rivers and lakes which will be affected by Garrison, then, Mr. Chairman and Members of the Committee, it is evident that total losses to Manitoba over the life of the project will be in the order of hundreds of millions of dollars.

My studies, conducted for the native fishery, which represents only a third of the entire fishery, have estimated direct, future losses to these fishermen alone to range between 48 and 218 million dollars.

Current project cost is estimated at over 1 billion dollars. This figure does not take into account potential Canadian damages as a result of the project. Governor Olson of North Dakota told this committee last week that for his state, the project's benefits will far outweigh its costs. Be that as it may, I'm sure that the governor did not take into account the losses to Canada I have just outlined. Does it really make any economic sense to continue constructing a project when the cost of damages to Canada which may, by themselves, approach one half of the total project costs, have not been taken in account?

Even if this Committee were to consider compensation for Canadian damages as a result of this project, the problem still remains that we as Manitobans, have always maintained that compensation is not an acceptable solution. We may be able to arrive at a stategy for compensating the citizens of Souris, Manitoba for the cost of a new water treatment plant, or the fishermen of Lake Winnipeg for the loss of commercial fish production. But how do you compensate the citizens of Souris for a river that is no longer attractive? How do you compensate the fishermen for the loss of a life style and livlihood for which there are no alternatives available? These are real people, Mr. Chairman, just like the North Dakota farmers who are suposed to receive irrigation benefits from the project. People in many cases very similar to the people of North Dakota, separated only by an artificial line on a map.

Mr. Chairman, the Garrison Diversion Project is only 15% complete, but it has nevertheless advanced to the point where irreversible damage to Canada is imminent. Lonetree Reservoir, the New Rockford Canal, and the Oakes Pumping Plant -- as authorized -- are not acceptable to my country, because they are part of a plan to link your watershed with ours. Our way of life, which we value as much as any of your citizens do theirs, depends on avoiding that linkage.

Canada first protested the Garrison Diversion Unit through diplomatic channels a full decade ago. The Final Report of the International Joint Commission has been available since 1977. The position of our citizens, our provincial government, and our federal government is clear -- you must abide by the Boundary Waters Treaty.

We very much value the friendship of your government, and hope you value ours. If you do, you must stop construction of the Garrison Diversion Project. Until the project is redesigned in such a way as to protect our interests, we request zero funding for the project.

STATEMENT OF ORVAL C. HOVEY, MEMBER, BOARD OF DIRECTORS, COMITTEE TO SAVE NORTH DAKOTA, INC.

The purpose of this testimony is to request a zero budget for the controversial Garrison Diversion Project. The reason for this request is that many people in North Dakota, South Dakota and Canada believe that the eventual spending of $1,018,343,000 of U. S. government money (latest Water and Resources Service estimate) will have little net good in production, will benefit only a few farmers, and will adversely affect many people in the United States and Canada.

The main reasons for stopping funding and construction of the Garrison Diversion Project are as follows:

1. Both the Canadian House of Commons and the Manitoba Parliament voted unanimously to request the Canadian government to express their concerns about return flows of the portion of the Garrison Diversion Project that drains into Canada (about 75%). Their prime concern is the transfer of harmful biota from the Missouri watershed to the Souris and Red River watersheds, thereby harming their fishing industry.
2. Organizations along the James River in South Dakota have filed suit in Federal Court to halt proposed construction of portions of the project that drain into South Dakota (about 25%).
3. In North Dakota the irrigation portion of the project involves a land use change of 459,186 acres to irrigate 250,000 acres. The present production on the land involved in the project nearly equals the anticipated production on the land to be irrigated. The water used for irrigation is lost for generation of power at Garrison Dam and four other down-stream dams on the Missouri River. There will be little net gain in total production.
4. The Fish and Wildlife Service feels the Garrison Diversion Project will be a net loss because they estimate that 196,977 acres should be mitigated instead of 146,530 in the updated Garrison Project.
5. The total cost of the project is so high that people who benefit couldn't possibly pay for their share of the benefits. The projectwill cost about $5. for every man, woman and child in the United States or about $1500. per capita in North Dakota. This cost would be $3320. per acre to be irrigated which amounts to $500,000. subsidy for every 160 acres of land to be irrigated. The project benefits only 0.6% of the land in North Dakota. For a project to be feasible, people who receive the benefits should be willing and able to pay their share of the costs.
6. Promoters of the project claim that in periods of drought the project is needed to provide feed for livestock. However, unless the drought can be forecasted a year or more in advance, the feed crops would not be planted in time to provide the extra feed required for livestock.

In conclusion, I believe that people who are concerned about international relations, inflation, the federal budget, total land use and wildlife would like to see construction on the Garrison Diversion stopped and use the resources and money to help solve our energy problems.

I maintain that the project isn't needed now, and if at some future time the above problems are solved or we need the agricultural products from irrigated land, we can still build the Garrison Diversion Project.

STATEMENT OF TERRY SARGEANT, M.P., HOUSE OF COMMONS, CANADA

I am writing to you as a Canadian elected official from the Province of Manitoba who has very serious concerns about the environmental and economic implications, for my Province, posed by the Garrison Diversion Project as it is presently planned.

I believe it would be fair to say that in the Province of Manitoba there is virtually universal opposition to the proposed Garrison Project in the state of North Dakota. There is no doubt in the collective mind of Manitobans that the Garrison Project spells ecological and economic disaster. Briefly let me highlight for you our concerns.

During the early 70's the Garrison Project was the subject of several American-Canadian diplomatic notes. Serious questions about water levels, water quality and biota transfer had not, to the Canadian way of thinking, been resolved. Consequently, the matter for transboundary implications of the Garrison Diversion Unit was referred to the International Joint Commission.

The I.J.C.'s report confirmed Manitobans' worst suspicions. While the issue of water levels was not too serious, it was very clear that the water quality on the Souris and Red Rivers would be very much affected and perhaps most significantly the transfer of foreign biota into the Hudson Bay Basin from the Missouri River Basin would be catastrophic for the commercial and sport fishing industries on Lake Winnipeg. Lest you think that this is a small sacrifice in order for North Dakotans to reclaim more land for productive farm use let me illustrate what is at stake here for many communities in Manitoba.

Water quality for communities on the Red, Souris and Assiniboine Rivers will be increasingly more expensive to maintain should the Garrison be completed. A best guess estimate as to how much it would cost these communities to upgrade their water purification systems is $1.3765 million (in 1979 C$) annually. This figure becomes astronomical when multiplied over the years!

Biota transfer is perhaps the most serious problem. At present Lake Winnipeg supports fairly sizeable commercial and sport fishing industries. The introduction via the Garrison Diversion of such garbage fish as the Utah Chub, the Rainbow Smelt and the Gizzard Shad poses a very substantial threat to the continued viability of those industries.

Manitoba's commercial fisheries on Lake Winnipeg bring a benefit to Manitoba of $6 million annually (in 1979 C$). Here I have included secondary industrial benefits such as fish processing and packaging as well as the direct value per kilogram of fish caught. Estimates, both from the I.J.C. and private sources indicate that the fishing would be halved by the introduction of foreign biota that would pray on the commercially successful fish.

What does this mean in socio-economic terms? It means that as a direct result of North Dakota's Garrison Project, municipalities would be forced to raise taxes to pay for improved water treatment techniques; a lessening of the tourism industry as a result of the reduced desirability of sport fishing in Manitoba; a reduction, by half, of the number of commercial fishermen on Lake Winnipeg and, as a consequence, increased unemployment in what can already be described as an economically depressed area.

There are as well many native Indian communities whose way of life is directly affected by Lake Winnipeg. One third of the fishermen on Lake Winnipeg are native - some fish commercially, some fish at the subsistence level. Any reduction in fish population as a result of foreign biota or disease cannot help but drastically affect their way of life. The economic consequences of such changes in lifestyle cannot be quantified.

There is no doubt in the minds of Manitobans that water from the Garrison will pollute Canadian waters to the detriment of health and property. The International Joint Commission admitted that:

> "even with the best engineering talent available and with the best operating practises possible, the very complexity of the scheme, the immensity of the physical features, the large numbers of human beings involved in carrying out the responsibilities and the possible mechanical failures, what cannot happen, will happen ... There must be 100% assurance of fish passage prevention over in infinite time."

The chance of ecological disaster in Manitoba as a result of the Garrison Project is extremely high. Also, I believe that the passage of Missouri River Basin waters into the Hudson Bay Basin would be a clear violation by your country of the Boundary Waters Treaty of 1909.

It is my hope that at some point in time a solution can be found to these problems, but at present Manitobans and Canadians stand firmly opposed to the Garrison Project. That opposition will not be lessened until our concerns have been resolved. To date, however, our concerns most certainly have not been allayed.

In writing to you I hope that I have made you more aware of the seriousness of this matter for Manitobans. We are not now prepared to allow a vibrant portion of the socio-economic and ecological life of our province to be destroyed. And we are convinced that the more U.S. Legislators know about this matter the more sympathetic they will be to our concerns.

Each year we see new appropriations for Garrison approved by Congress despite the constant objections of our diplomats in Washington. One can only conclude that somehow our message has not reached these people making this important decision affecting our Province. Surely anyone realizing the magnitude of the problem for Canada would not continually pour funds into this project until such a time as the outstanding bilateral issues have been resolved.

It is my understanding that your committee is considering testimony regarding the Garrison Project. I hope you will consider this letter as a verbal submission. Should you want any further information please write to me in Ottawa or call at area code 613 - 992-9703.

STATEMENT OF RICHARD STEINBACH, CHAIRMAN, NEW ROCKFORD CANAL PROTESTORS

We believe there should be no further funding for the Garrison Diversion Unit at the present time because of the doubts and questions many people have concerning the project.

The estimated cost of the project when authorized was $212 million. The present estimated cost is well over $1 billion dollars and rising. This translates into an incredible irrigation investment of $3,320 per acre. With the project at least 20 years away from completion, the final cost will surely be prohibitive.

We also believe there are some serious design defects. Over $4 million dollars have been spent to repair the McClusky Canal. When the canal is dry there are slumps. When water is put in the canal there are serious seepage problems.

By the Water and Power Service's own estimates 40% of the water which leaves the Snake Creek pumping plant at the beginning of the project will be lost to evaporation and seepage.

Over 500 megawatts of renewable resource power will be used and lost by the project.

North Dakota presently has a very good dry land agriculture. We lead the nation in the production of spring wheat, durum, and sunflowers. Four years out of five we have ample rainfall for excellent crops.

The 250,000 acres which the Project would irrigate is only .6 of 1% of the agricultural land in the state. So when we get future dry years, over 95% of the state's farmers will survive just as they have in the past even should the project be completed.

We now need some remedial legislation.

Some of the land for the Lonetree Reservoir was acquired nearly 8 years ago and to date former owners have had first choice to rent till the land is used. After eight years the land is rented on a bid basis. This could cause many small farmers to lose the land because they could not afford to be the highest bidders.

We should have some legislation to permit former owners to continue to have first chance to rent this land.

Along the New Rockford Canal right-of-way we have eight land owners who lost their land by condemnation almost 18 months ago. To date the Justice Department has not processed these cases.

We believe that the government will not be able to build the New Rockford Canal because of the objections of Canada. Because of this, we believe that these parcels of land should be returned to the former owners.

For these and the above reasons we very strongly believe there should be no further funding for the Garrison Diversion Project at this time.

STATEMENT OF BILL AITKEN, GENERAL MANAGER, INTERLAKE DEVELOPMENT CORP.

The Interlake Region is that part of the Province of Manitoba located between Lakes Winnipeg and Manitoba and extending from the City of Winnipeg to the 53rd parallel of latitude. A major portion of the Interlake economy is based on the commercial fishing of whitefish, walleye, and sauger, a value of over $11,000,000 in the 1978-79 season. The tourism industry in this playground part of Manitoba is very dependent on sport fishing of trout and pickerel. There are 12,000 native people living in the region who not only are part of the commercial fishing industry but many of whom make fish a major sustenance item in their diets.

The Garrison Diversion Project, as currently authorized, will cause Missouri River water to cross a great divide and drain through the Hudson Bay Drainage Basin. The resulting transfer of fish life, parasites, and diseases will have a damaging effect on the valuable resource in the Manitoba lakes. There is so much at stake here that man-made screens or other devices cannot be depended on for all times to prevent biota transfer.

The Interlake Development Corporation is supported by memberships of the towns, villages, and local government districts of the region. Its directors, the mayors, reeves, and councillors, represent the 55,000 people of the Interlake. This region has nothing to gain from the Garrison Project, but it stands to lose a great deal as it is presently designed.

The Canadian concern may have been overlooked when the project was devised because of the long standing dream of North Dakotans to get irrigation. Now that the problem has been identified and recognized by the International Joint Commission in 1977, the project should be redesigned to eliminate the transboundary transfer of water.

Respectfully submitted on behalf of the Interlake Development Corporation.

LETTERS FROM LYLE N. LONGCLAWS, GRAND CHIEF, FOUR NATIONS CONFEDERACY, INC.

March 4, 1981

Honourable Senator Mark Hatfield
Chairman, Senate Appropriations
Subcommittee on Energy & Water Development
Room 1322, DSOB
Washington, D.C. 20510

Dear Senator Hatfield:

Re: Appropriations Hearings - Garrison Diversion Unit

I am addressing this letter to you on behalf of the sixty-one (61) Treaty Indian Bands in the Province of Manitoba, with an approximate population of fifty thousand (50,000) people. The Chiefs of Manitoba, Canada, act as the Board of Directors of the organization that I am the primary elected spokesman of - the Four Nations Confederacy.

One of the greatest concerns of the Indian people of this province is the Garrison Diversion Unit (GDU). Independent studies sponsored by the Four Nations Confederacy established that this massive diversion scheme would detrimentally affect some twenty-eight (28) Indian Bands in Manitoba which currently represents some twenty-five thousand (25,000) Treaty Indians. As the attached map indicates, these communities are located along the Assiniboine and Red Rivers, Lakes Winnipeg, Manitoba and Winnipegosis, and along part of the Nelson River system. Waters discharged from the Garrison project into Canada will flush in salts and fertilizers, pesticide residues, nutrients and animal wastes, along with eroded soils, and will degrade the drinking water, affect potential irrigation projects and cause several medical problems to the Bands along the Assiniboine and Red Rivers.

The impact of the Indian commercial fisheries stands out as a particularly severe threat to Manitoba's Treaty Indian people. With the introduction of foreign fishes and their associated diseases and parasites, the International Joint Commission (I.J.C.) has predicted a devastating reduction of the four (4) commercially important fish species in Lakes Winnipeg and Manitoba. Overall, the I.J.C. predicted damages ranging from fifteen to seventy-five percent (15 to 75%) in lake whitefish, lake herring, walleye and sauger as a result of the project.

There are some twenty-four (24) Treaty Indian communities located around these lakes, who take an active part in the commercial fishery and whose sole livelihood, in many cases, depends entirely on the fishery. On average, Indian fishermen account for roughly one-third (1/3) of all fishermen and all gross revenues for the entire Manitoba fishery. The value to all fishermen on the lakes during the 1979-80 season was some sixteen (16) million dollars. In special studies conducted on behalf of the Four Nations Confederacy, it was estimated the losses to commercial fishermen alone to be near thirty (30) million dollars. When the subsistence fishery and the sport and guiding related activities are calculated it's easy to see that losses for the entire fishery will run into the hundreds of millions of dollars.

These are just a few of the costs that we must shoulder should Garrison be completed. Do Indian people receive any of the benefits?...No.

Obviously, the political voice of the Treaty Indian people of Manitoba cannot afford to stand still on this issue. Since 1977, the Four Nations Confederacy (formerly the Manitoba Indian Brotherhood) has testified at the I.J.C. hearings; initiated research on the impacts of the G.D.U. in terms of Indian water rights; embarked on an extensive Band and public awareness campaign; conducted tours of the project site; facilitated a forum on the Garrison project; and participated in "Friends of the Court" action in Washington, D.C.

We would like to stress that should the Garrison Diversion Unit be completed as authorized, the social, economic, environmental and cultural fabric of a large number of Indian people will literally be destroyed. We feel that we have a legitimate demand in requesting that we be allotted a time period to testify on the Fiscal Year 1982 Appropriations Bill.

Please allow me to quote from the "Text of Reference to the International Joint Commission" as found in the report on the Transboundary Implications of the Garrison Diversion Unit.

> "The Government of the United States has assured the Government of Canada that in any development of features of the Garrison Diversion Unit that will affect Canada, specifically works in the Red River Basin and the Souris Loop, the United States will comply with its obligation to Canada not to pollute water crossing the boundary to the injury of health or property within Canada. The Government of the United States has similarly assured the Government of Canada that no construction potentially affecting waters flowing into Canada will be undertaken unless it is clear that this obligation will be met." (pp. 130-131)

The next phase of construction is the signal to all of us that the elected officials of the United States will renounce all promises to not harm Canada and purposefully violate an International treaty.

Your positive response to appear before the Appropriations Hearings scheduled for this summer would be greaty appreciated.

Respectfully yours,

Lyle N. Longclaws

Lyle N. Longclaws
Grand Chief

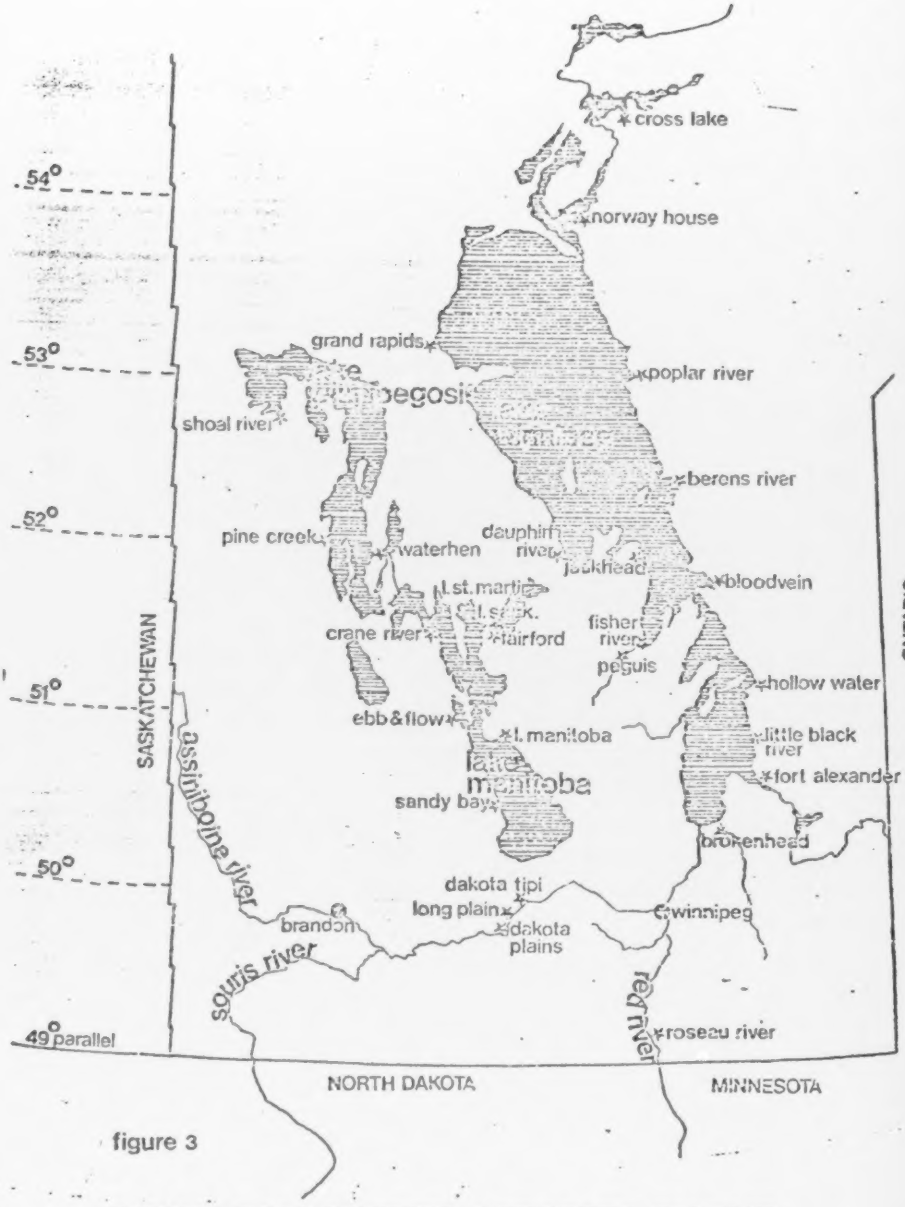
cross lake
54°
norway house
grand rapids
53°
lake winnipegosis
poplar river
shoal river
lake winnipeg
berens river
52°
pine creek
waterhen
dauphin river
jackhead
l. st. martin
bloodvein
l. st. m.
fisher river
crane river
fairford
SASKATCHEWAN
ONTARIO
peguis
hollow water
51°
ebb & flow
l. manitoba
little black river
lake manitoba
fort alexander
sandy bay
brokenhead
assiniboine river
50°
dakota tipi
long plain
winnipeg
brandon
dakota plains
souris river
red river
roseau river
49° parallel
NORTH DAKOTA
MINNESOTA

figure 3

INDIAN COMMUNITIES AFFECTED BY THE GARRISON DIVERSION UNIT

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March 25, 1981

Honourable Senator Mark Hatfield
Chairman, Senate Appropriations
Subcommittee on Energy & Water
Development
Room 1322 DSOB
Washington, D.C. 20510

Dear Senator Hatfield:

On March 4, 1981 I wrote to you on behalf of the Four Nations Confederacy regarding the Garrison Diversion Unit and its projected effects on a major segment of the Indian population of the Province of Manitoba. As stated in this letter it has been established through independent studies sponsored by the Four Nations Confederacy that this diversion plan will detrimentally affect some twenty-eight (28) Indian Bands in Manitoba representing approximately half of the total Indian population within the province. Some of the areas of concerns would include degradation of drinking water and potential medical problems to those Bands located along the Red and Assiniboine Rivers, a potential major loss of revenue in the fishing industry in both the commercial and recreational areas, etc.

Our organization, and its predecessor the Manitoba Indian Brotherhood, has since 1977 made every effort to make our views on the project known to ensure that our concerns are seriously considered in the decision on whether to proceed with the Garrison Diversion Unit. Some of our activities in this regard are outlined in the letter of March 4, 1981.

I had hoped that our organization would be allowed a time period to testify on the Fiscal Year 1982 Appropriations Bills but I understand that due to time constraints you are unable to meet with our request. These hearings are, as I understand it, slated for March 31, 1981. I would like to state that our organization is extremely disappointed that we will not be allowed a specific time slot to represent to you the very serious concerns of the Indian people of Manitoba.

Mr. Onno Kremers of Winnipeg, Manitoba will be making a presentation to your committee and I would like to advise that Mr. Kremers is authorized to speak on behalf of the Four Nations Confederacy regarding the concerns of the Indian people on the projected effects of the Garrison Diversion Unit. Mr. Kremers is extremely knowledgeable in this area and will more than adequately represent our concerns.

I would also like to advise that Mr. Kremers has also the authorization from the Four Nations Confederacy to use an audio visual presentation produced by the Confederacy on the Garrison Diversion Unit. It is my sincere hope that you and your committee will take the time to view this presentation as it will no doubt graphically illustrate the very real concerns of the Indian people of Manitoba concerning the effects of the Garrison Diversion Unit on this and future generations of not only the Indian people but of all citizens of Manitoba.

I sincerely hope that due consideration is given the concerns of the Indian people of Manitoba in reaching your decision regarding the future of the Garrison Diversion Unit.

Yours in recognition of treaty and aboriginal rights,

Lyle N. Longclaws
Grand Chief
Four Nations Confederacy

NOLICHUCKY DAM, TENN.

STATEMENT OF DANIEL BURGNER

Chairman HATFIELD. Our next witnesses are Daniel Burgner for the Nolichucky Waterfowl Sanctuary, TVA, and John Graham, Kentucky River Coalition.

Mr. Burgner, would you care to proceed first?

Mr. BURGNER. Thank you, sir.

My name is Daniel Burgner. I am a dairy farmer in Marion County, Tenn. I also have a Ph. D. degree from Clemson University in engineering and my work background is an industrial engineer in Indianapolis, Ind. Therefore, I feel qualified to talk on this project.

Of course, as you said, you read very well. I won't read the whole statement, and you have the references here at the back so you can check out everthing I have in here. I also have a photograph of the project to show everybody how it exists now. I will proceed and let you examine that.

You have a picture there of a 10,000-kilowatt hydroelectric project, approximately 60 years old. The TVA could not afford to continue operation of it because it cost $5 million, which they felt was too high. On the other hand, they could afford $8 million to convert the thing into what we commonly refer to in Marion County as a duck pond.

The present use has not lived up to its expectations, and on this basis alone we feel that the relatively small amount of money that is being sent down by Washington to operate the thing should be cut off.

The TVA says it doesn't want to continue to consider putting this project back in operation. If it doesn't want to do it, we feel like it ought to turn it over to somebody who will.

On the other hand, I feel that TVA is going to have to be forced to do it. Obviously, without money they can't operate this thing in the present situation, so they will have to do something with it.

Now, as a dairyman, I am willing to accept a cut in the milk price support that has passed the Congress in the past few days, just so long as everybody else taking from the Federal trough gets it, too. Thank you, sir.

Chairman HATFIELD. Thank you very much. Your full statement will be put in the record.

[The statement follows:]

STATEMENT OF DANIEL E. BURGNER, MARION COUNTY, TENN.

The Nolichucky Project, located in Greene County, Tenn., was a 10,640-kilowatt hydroelectric facility.

In 1970, TVA decided to retire the facility due to lake siltation, deterioration of the civil works, and equipment disrepair. The total costs for continued power generation over 20 years was $5 million while the power benefit was $2 million.

TVA took this power facility, valued at $1.5 million, spent $2.8 million of power funds on the dam, spent $600,000 for additional land to grow grain for ducks and by 1977 had the project on line as the Nolichucky Waterfowl Sanctuary and Environmental Study Area. TVA further reported that in 1978 it allocated $160,000 for "environmental education and waterfowl management." This annual rate over a 20-year period would add $3.2 million for operations and maintenance. The total cost for the present use therefore could amount to $8.1 million keeping in mind that as a power facility it would have cost $5 million.

In addition to the futility of continued power generation in justifying the present use, TVA stated that the silted lake offered "a unique opportunity to develop and maintain a waterfowl sanctuary combined with a program of environmental education and nature study." In 1970, the lake offered little more than a resting place for waterfowl. Occasional small flights of ducks were seen, and up to a few hundred waterfowl were present in isolated sloughs. Development of the land and water area behind the dam and for about 3 miles upstream was to enhance migrating and resident waterfowl.

A goal set by TVA was the equivalent of 39,000 day-use visits annually within 5 years of completion. This visitation would have an economic impact of $156,000. The project is now in its fourth year and the highest number TVA has reported thus far is 10,500 or just over one-fourth its original goal.

Another goal was the establishment of a resident Canada goose population and a resident wood duck population of 300 birds and 1,000 birds respectively. This past Christmas a local bird watcher's club counted 33 geese and no wood ducks.

TVA further predicted that "with a proper combination of exposed green browse and fall-flooded grains, perhaps as many as 10,000 ducks could be attracted to the lake * * *" While TVA's counts approached 2,000 birds, the birdwatchers, who have nothing to gain or lose over the result, counted 73 total waterfowl in their Christmas 1980 bird count.

Despite the original predictions and the relative performance to date, TVA claims that its Nolichucky Project is "highly successful."

As to restoring the electric powerplant, TVA contends that it is so uneconomical that a new feasibility study costing about $30,000 is a waste of money despite that it spent 4.3 million dollars' worth of power assets for this nonpower use. It has been suggested that TVA consider selling or leasing it to someone who would redevelop the power facility. While TVA remains skeptical as to who would make an attempt, it has allowed me in company with turbine and generator manufacturers and civil works contractors, to inspect the plant to get an estimate of the direct costs necessary for redevelopment.

With these estimates, the rate TVA proposes to pay for dispersed power production, and the guidelines of the U.S. Army Corps of Engineers Guide Manual, I have calculated cost-benefit ratios of 1.2 to 2.5 depending upon which scheme of development I would attempt. The net revenues from power production would return the direct costs for material and labor in 2 years.

TVA's primary concern relative to restarting Nolichucky Dam is its potential impact on the present use. Obviously, without funds to operate and maintain it, there would be no present use for restarting to impact.

As to the problem of discontinuing a completed project, TVA's environmental impact statement clearly stated "there are no irreversible or irretrievable commitments of resources related to this project * * *"

As to the problem involving the autonomous relationship of the power program to the nonpower program, Nolichucky Dam is no longer listed as a power asset. The remaining value of the dam was "wrote off" and the properties transferred to the nonpower program.

I should further point out that the Greene County, Tenn., legislative body and the Tennessee State Legislature have both passed resolutions expressing their desires that Nolichucky Dam be restored as a power facility.

I request this committee not to appropriate any more taxpayer money to the Nolichucky project.

REFERENCES

1. TVA-OHES-EIS-72-2, "Rehabilitation of the Nolichucky Project."
2. Letter to Daniel Burgner from James Swanson, TVA, Norris, Tenn., dated October 16, 1978.
3. Schedules A&C, TVA financial statements, 1971 through 1977.
4. "The Knoxville News-Sentinel," March 7, 1976, page C-1.
5. Letter to Daniel Burgner from Louis M. Gwin, TVA Information Office, Knoxville, Tenn., dated November 14, 1977.
6. Letter to Senator Howard Baker from TVA Chairman S. David Freeman, dated December 23, 1980.
7. "The Greeneville (Tenn.) Sun," January 8, 1981, page 5.
8. "Feasibility Studies for Small Hydropower Additions," U.S. Army Corps of Engineers.
9. Resolution of the Board of Commissioners for Greene County, Tenn., dated June 7, 1979.
10. HJR No. 483, State of Tennessee House of Representatives, dated February 21, 1980.
11. Letter to Daniel Burgner from TVA Chairman David Freeman, dated January 5, 1979.
12. Letter to Daniel Burgner from TVA General Manager William Willis, dated September 21, 1979.

YATESVILLE LAKE, KY.—OPPOSITION

STATEMENT OF JOHN GRAHAM, BLAINE COUNTY, KY.

Chairman HATFIELD. Mr. Graham?

Mr. GRAHAM. Mr. Chairman, I appear as a representative of the community of Blaine, Ky., and am here to ask why the Corps of Engineers is allowed to continue working on the Yatesville Dam project. This is a project for which future funding has been terminated, not because the money is not available, but because the project itself is so full of negative aspects that they completely override any benefits the community and the taxpayers can derive from it.

The need for the Yatesville Dam was originally stated as necessity for flood control; also that completion of the dam and its recreational facilities would stimulate a boon in the economy of the community. The facts are that the dam's effect on flood control is minimal. The lowering of the Big Sandy River 2.54 inches at Catlettsburg, Ky., 25 miles down river, hardly affects flooding of the lower Big Sandy River basin.

The fact that fresh water fish have a hard time flourishing in an environment containing excessive amounts of salt and oil brine sediments, which will be present in the Yatesville Reservoir, will limit the value of the Yatesville Reservoir as a recreational facility. If the Yatesville Dam project is built exclusively as a recreational facility, it will have to compete with six other recreational facilities within a 50-mile radius, the majority of which lost money last year, costing Kentucky's taxpayers in excess of a million dollars.

It has been said the Yatesville Dam will boost the declining economy of our county. The fact is that it has stunted the growth of the county's economy. It has denied private enterprise access to the millions of tons of recoverable coal and the numerous gas and oil fields which underlie the project area. These fields remain undeveloped and those that were existing and producing have been shut down because of the Yatesville water project.

There are, in the upper reaches of the Blaine Valley, in excess of 2,000 oil, gas, and water wells involved in the production of a much-needed natural resource. Approximately 25,000 barrels of oil and gas are being produced each month. Both the number of wells and the production figures are on the rise because a large number of new wells are being drilled in the area.

Hundreds upon hundreds of acres of the most fertile farmland in eastern Kentucky has lain idle since being purchased by the Corps of Engineers. The value of the tobacco, corn, and hay crops has been taken from the economy of the community, not to mention the tax dollars that were paid by those landowners. These displaced landowners have, for the most part, moved from the county and taken their tax dollars and farming enterprises elsewhere.

The people of our community, and I as its representative, applaud the efforts of President Reagan's administration in trying to streamline our Government by stopping the needless and wasteful spending which is prevalent in some of our country's programs. We also applaud President Reagan for deleting the $6.9 million which had been appropriated for the Yatesville Dam project from the 1982 budget. But if this administration feels that further funding of the Yatesville water project is wasteful, then why is the Corps of Engineers being allowed to continue spending money on a project which has so many negative aspects?

The Corps of Engineers has received several million dollars of funds in President Carter's 1981 budget for the continuation of the Yatesville Dam project. Presently, the Corps of Engineers is reevaluating the property in my community and intends to start negotiations with the intent to purchase our homes in the near future.

The people of my community fear that if the funds allocated for this project in 1981 are not rescinded and put to a more constructive use, that we will become victims of the historical practices of the Corps of Engineers. These practices not only include shortchanging the property owner on the value of his home, land, and heritage, but also shorting the owner of acreage that is specified by the deed. The methods of acquisition of the Corps of Engineers have already been employed in our community and others in which they have worked. As a last resort, they will condemn your property. At this time, if you are approached by the Corps, you have no recourse but to sell. If you don't, they will take it.

On February 10, 1981, the Corps of Engineers received written notice by the department of parks, State of Kentucky, that the Yatesville Dam project had been reevaluated. The letter went on to state that upon advise by counsel, the contract between the State and the Corps of Engineers for this project was invalid and a new contract would not be negotiated without the approval of the Kentucky General Assembly.

The State of Kentucky does not want or need to be saddled with this ill-conceived project; nor do the people of my community. But the Corps of Engineers has $2 million yet to spend, and spend it they will. So as a representative of my community, I am here to ask you to transfer those funds allocated to the Yatesville Dam project for 1981 and place them in a project or program that will be beneficial to the people, not detrimental.

In closing, sir, I would like to emphasize that the people of the community do not want this dam. The State doesn't want it. And that natural resource will remain undeveloped because of it, and few flood control benefits can be derived from it. Sir, I would like to thank you for the time allotted to us.

Chairman HATFIELD. Thank you very much, sir.

[The attachments to the statement follow:]

YATESVILLE LAKE: THE FACTS

Flood Control

- The Yatesville Project will reduce the 100 year flood at Catlettsburg by only 2.54 inches.
- It will provide no benefits for lower Blaine Creek or the Big Sandy River.
- Its construction will delay expenditures for floodwalls and other non-structural flood protection for the Big Sandy Valley now stalled in Congress

Recreation

- Yatesville Lake will be the 7th recreational lake in a 50 mile radius.
- Salt, brine, oil and brine sediment from the extensive energy developments directly above the lake will hinder the recreation purpose.
- The Kentucky Department of Parks in a letter to the Corps of Engineers dated February 10, 1981, stated that the Department cannot support recreation facilities for Yatesville Lake.
- The Corps recently stated in a letter to KRC that "The recreation, fish and wildlife project purpose (of Yatesville Lake) would now have a negative benefit." The letter was dated March 10, 1981

Water Quality

- A 1978 Urban Water Quality Study for Ironton-Huntington-Ashland, immediately below the dam, showed that private industry was satisfactorily treating its own waste. The study also indicated that cities with sewer lines were building advance (tertiary) sewage treatment facilities.
- The Yatesville Lake Project includes pollution dilution benefits even though this study clearly shows that waste-water is being properly handled at its sources.

Energy Resources

- Five gas and two oil fields underlie the project area.
- According to a former head of the Kentucky Geological Survey's Oil and Gas Division, these fields are 80% untapped
- Seven million tons of economically recoverable coal lie under the Yatesville Lake Project area.
- The Corps of Engineers maintains that these reserves will have "only insignificant effect on the overall land value."

Project Economics

- The total cost of the Yatesville Project has risen to $96,020,000 for FY 1982, This is over a 50% increase from FY 1981.
- The cost to the Commonwealth of Kentucky is now $6,335,000 for FY 1982, an increase of 70% form FY 1981.
- The Corps continues to use the artificially low interest rate of 3.25% which falsely increases the benefits while hiding the true cost of the project to the public.
- The benefit-cost ratio for the project is a extemely marginal 1.12 to 1.

Land Acquisition

- Some 70 families (8,000 acres) could still be displaced if this project is allowed to continue.
- While 60% of the land needed has been purchased, only 1% of the construction has been completed--a 0.5 mile gravel road.

- Half of the $11 million already spent could be recovered by selling the 13,096 acres of acquired land back to the public at half of the 1979 average value of Kentucky farmland.

A quote from an editorial in the Lexington Herald, March 6, 1981:

> "In the case of Yatesville, a controversial project apparently blessed with more lives than a cat, the end cannot come too soon. Although small in comparison to many of the Corps' endeavors, it is the epitome of wasteful 'pork-barrel' projects."

*all information verifiable on request

Letter From Richard E. Norton, Deputy Commissioner, Kentucky Department of Parks

February
10
1 9 8 1

James H. Higman, Colonel
District Engineer
Department of the Army
Huntington District Corps of Engineers
P. O. Box 2127
Huntington, West Virginia 25721

Dear Colonel Higman:

In response to the January 12 meeting between Department of Parks and Corps of Engineers staff, we have reevaluated the Yatesville Dam Project. On the advice of counsel, we cannot make a commitment for the State to the Yatesville project without being in probable violation of Sections 49 and 50 of the Kentucky Constitution. The existing Public Law 89-72 contract between the State and the Corps for Yatesville, in this view, is invalid and unenforceable. In addition, under the terms of KRS 56.874 which took effect on July 1, 1980, the State cannot enter into a new contract for Yatesville without the approval of the Kentucky General Assembly.

We regret to have to inform you of this matter at this time. However, we believe we would be less than responsible if we did not express our concern before the Huntington District resumes its design and construction efforts.

Please call if you have any questions or if we can be of any further assistance.

Sincerely,

Richard E. Norton, Deputy Commissioner
Planning, Construction and Maintenance

LETTER FROM JACKIE SWIGART, SECRETARY, KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

February 24, 1981

Mr. Tim Murphy
Kentucky Rivers Coalition
P.O. Box 1306
Lexington, Kentucky 40501

RE: Proposed Yatesville Reservoir

Dear ~~Mr. Murphy~~ Tim:

Since many of the aspects surrounding the Yatesville Lake Project relate directly to the Department for Natural Resources and Environmental Protection, Jim King has asked me to respond to your letter of February 5, 1981. While I cannot speak for the other state agencies involved in the project, it is still the Department for Natural Resources and Environmental Protection's opinion that the Commonwealth withold support for the reservoir until the appropriate benefits and costs are carefully reexamined in light of the current economic and environmental situation. The Department basically agrees with your contention that the project has marginal flood control benefits. In addition the Department feels that the Corps' presentation of anticipated water quality benefits are tenuous.

For your information, Richard E. Norton, Deputy Commissioner of the Department of Parks, recently communicated to the Huntington District Corps of Engineers that his Department had reevaluated the Yatesville Dam Project and decided they could not make a commitment for the State to the project without being in probable violation of Sections 49 and 50 of the Kentucky Constitution.

Mr. Norton also expressed the view that the existing Public Law 89-72 contract between the State and the Corps for Yatesville is invalid and unenforceable. In addition, Mr. Norton said that under the terms of KRS 56.874 which took effect on July 1, 1980, the state cannot enter into a new contract for the Yatesville Reservoir without the approval of the Kentucky General Assembly.

Thank you for continuing to provide us with your perspective on this project.

Sincerely,

Jackie Swigart

Jackie Swigart
Secretary

[From the Lexington (Ky.) Herald, Friday, Mar. 6, 1981]

Some Good News and Bad News as Reagan Shakes the Pork Barrel

The latest in the good news/bad news department emanating from the Reagan administration's efforts to cut federal spending relates to two U.S. Army Corps of Engineers projects affecting Kentucky.

Reports out of Washington indicate that the $94 million Yatesville Dam project in Lawrence County, and the $278 million Big South Fork Recreation Area in southeastern Kentucky and northeastern Tennessee may be slated for the axe when President Reagan delivers his budget proposal to Congress next week.

In the case of Yatesville, a controversial project apparently blessed with more lives than a cat, the end cannot come too soon. Although small in comparison to many of the corps' endeavors, it is the epitome of wasteful 'pork-barrel' projects. The official analysis estimates the dam will produce $1.20 in benefits for each dollar of cost. But that analysis was prepared when the price tag on the project was estimated at only $62 million, and even then it was questionable.

Ostensibly, the dam is designed to reduce flooding on the Big Sandy and Ohio rivers in Lawrence County. Realistically, it is not expected to provide any substantial flood relief outside the valley of Blaine Creek. At the same time, it would flood the Blaine Creek basin, permanently covering both the area's natural habitat and its underground deposits of coal, oil and gas.

Only the political clout of Rep. Carl Perkins has kept Yatesville alive until now. The Carter administration considered it one of the most wasteful projects of the corps, and successfully kept it from being included in water projects bills until last year. Of course, 1980 was an election year, and in order to stay on the good side of the popular Democrat from the seventh district, the administration conveniently forgot its objections.

But if the Yatesville Dam is a prime candidate for the chopping block, the Big South Fork Recreation Area probably is not. The proposal to turn 123,000 acres along the gorge of the Big South Fork of the Cumberland River into a recreation area must be one of the few times in recent history that the corps has tried to save an area's natural beauty instead of inundating it by building a dam.

The Big South Fork Recreation Area would include portions of McCreary County, as well as parts of four northeastern Tennessee counties. By providing access to the area — along with campsites and a lodge — the project is expected to provide a substantial boost to the local economy through tourism.

Still, it is difficult to object to Reagan's attempt to reduce federal spending. Any such reduction must, of necessity, include some sacrifice. And to his credit, Reagan has spread that sacrifice around.

If, indeed, the president's budget proposal excludes financing for Big South Fork, we can hope it is only a temporary setback. That same hope, however, cannot be cherished for the boondoggle at Yatesville

NATIONAL ENVIRONMENTAL CONCERNS

STATEMENTS OF:

ED OSANN, COALITION FOR WATER PROJECT REVIEW

JIM ELDER, WASHINGTON REPRESENTATIVE, SIERRA CLUB

BRENT BLACKWELDER, WASHINGTON REPRESENTATIVE, ENVIRONMENTAL POLICY CENTER

DAVID BERICK, WASHINGTON REPRESENTATIVE, ENVIRONMENTAL POLICY CENTER

CHARLES VERN DINGES, NATIONAL AUDUBON SOCIETY

Chairman HATFIELD. I would like to invite the three Washington representatives of the environmental organizations—Mr. Brent Blackwelder, the Washington representative of the Environmental Policy Center; Mr. Edward Osann, Coalition for Water Project Review; and Mr. Charles Dinges, Washington representative for the National Audubon Society, to come forward.

Gentlemen, I am going to start your testimony. I am very apologetic, but there is a very important leadership meeting that has been called since this hearing was scheduled. I will have to leave before you finish. The staff will complete the hearing.

I will carefully review your testimony. That happens to be the context in which we are operating this morning.

Mr. OSANN. We understand, Mr. Chairman.

As you know, conservationists have testified many times in the past. Frequently, we have found ourselves in disagreement with the actions by the committee. We feel that the circumstances this year present opportunities for some change and for some new direction. Our intention here this morning is to step back a little bit and offer some of our thoughts for some new direction for the committee.

I am the coordinator for the Coalition for Water Project Review. My name is Edward Osann. I am on the staff for the National Wildlife Federation.

The coalition is an ad hoc group of about 20 of the major conservation organizations. We came together 20 years ago supporting the view of Federal water projects.

WATER RESOURCE DEVELOPMENT

There is little doubt in our minds that water resources conservation and development programs are an important part of the agenda of the Nation. Indeed, we are not certain but that water resources development may need more money in the future than we are currently spending in this program area right now.

In summary, our feeling is that we don't need to spend more money on the kinds of projects that dominate the budget now before the committee.

For example, we believe that changes in the area of water conservation are desperately needed. Even if the current drought were to subside, we all know there will be another one down the road somewhere. The Ogallala aquifer, the major source of water for Texas, Kansas, Nebraska, Colorado, Oklahoma, South Dakota, and Wyoming, is being unnecessarily pumped dry for agricultural use in these areas, areas which are contributing substantially to our favorable balance of trade in agricultural commodities.

This is a serious problem, perhaps one of the most serious water resource problems of the country.

The Appropriations Committee—as the last committee days of testimony will attest—is being asked to fund projects concerned with local interests while the national interests, goals, and objectives somehow fail to emerge. Clearly the legislation that is before the committee constitutes an agenda that was developed in the 1940's, 1950's, and 1960's. Certainly the $4 billion in titles 2 and 3 of the energy and water appropriations bill do not represent, cannot be said to represent, a concerted Federal effort to address current pressing national needs.

Six of the major projects now in the budget and proposed for construction funding involve three-quarters of a billion dollars for fiscal year 1982. The Tennessee Tombigbee Waterway was authorized in 1946, the Central Arizona Project in 1968, the Red River Waterway in 1968, locks and dam 26—the most recent authorization—1978, Russell Dam, Ga. and S.C., was authorized in 1966, while the Central Utah Project was authorized in 1956.

To complete these projects will require allocations of about a billion dollars a year for the next several years. This will amount to about 40 percent of the total water resources construction budget.

Simply stated, the Appropriations Committee will be unable to undertake the necessary reform measures needed for a national policy as long as so few local projects consume such a large portion of moneys of the funding available.

Mr. Elder. Mr. Chairman, I am also going to be brief. I don't mean the first part of my statement to be interpreted as a negative, but I hope it will be helpful.

I think that we can look back and in recent years we see the audits by the Inspector General. The Department of the Interior has done studies in five river basins and found that the taxpayers through mismanagement have been paying billions of dollars. I think central California was about $8 million in the red. GAO reports during the last decade have pointed toward inflated claims. We also can see indictments and convictions of water contractors who have been doing water maintenance in the last couple of years. Recently GAO has come out with a report titled, "Federal Charges for Irrigation Projects Reviewed Do Not Cover Costs." Specifically, and just to go through some of the figures very quickly, if we go to central Nebraska, the taxpayers are funding, for the North Loup, in 1978 figures, $131.6 million for the project. I believe it is now projected to go over $200 million. Yet, the return by the irrigators is only $27.3 million.

There is a project in South Dakota on which the water users are paying $3.10 an acre-foot. The cost to the Federal Government is $130 per acre-foot. I think that points out the massive subsidies and problems we have in this program that need to be closely scrutinized.

Basically, I would like to say here that one thing that is curiously missing is a national policy for water conservation. There is no question that such a policy could have enormous savings of water to this Nation and, of course, moneys for the taxpayers.

Part of the problem is going to be looked at if you go into residential sections, which covers about 6 percent of the usage in this country, although for urban areas it is much heavier. We are talking about the possibility of a 25- to 50-percent savings if basic conservation devices were used in the homes.

In the agricultural sector the savings can be much larger. I think they account for 70 percent of the water used. Most of it is irrigation. The problems there range from overwatering to no irrigation schedules to tremendous subsidies to these people.

It was pointed out earlier to encourage these people to use or lose these subsidies. I think a classic example is Yuma, Ariz., where the people are paying $25 per acre-foot for water. I believe a study says that is equivalent to about eight football fields for about $25. That is a ridiculous subsidy. I think the public is aware of it and asking it be changed.

SUGGESTED REFORMS

The last thing I would like to say here, and I think it is very important, is that this committee has a historic opportunity to change direction, just by some of the tools they have at hand. We would like to make some suggestions to this committee as they go through the budgetary process, the appropriations process, and look at the projects that are asking for funding.

First of all, we believe that all projects should be in strict compliance with applicable State and Federal laws. Federal environmental policy—such as the National Environmental Policy Act, Clean Water Act, Fish and Wildlife Coordination Act, flood and wetlands, Executive orders, and so on—should determine which projects are considered for further appropriation by this committee.

Second, the projects that don't measure up to cost-benefit analyses using current Federal discount rates should be canceled, unless the users agree to fully reimburse the Federal Government all construction and maintenance costs.

Third, the committee should not be funding projects in the absence of a supporting consensus by all affected State and local governments and members of State congressional delegations.

First of all, let me say that if the committee does not screen these projects, then we can expect from the authorizing committees more of the same. We also, because of the taxpayers growing criticism of the tax money waste, can expect more White House interference in these affairs.

On the other hand, if the committee does screen these projects, eliminate those which are marginal, then we can expect a program which will have more national direction to meet the needs of this country.

Mr. Crow. Thank you very much.

For the record, I should say that I am Steve Crow with the majority staff and to my left is Proctor Jones with the minority staff.

Again I want to apologize for the chairman having to leave, but there was a meeting that had been arranged after we had already set up this hearing.

Mr. Dinges?

GARRISON DIVERSION UNIT, NORTH DAKOTA—OPPOSITION

Mr. DINGES. Yes, it is again a privilege to be here, and I appreciate the opportunity to testify at these hearings on two projects of major concern to the 415,000-member National Audubon Society. They are the Garrison diversion unit in North Dakota and the O'Neill unit in Nebraska.

I am Casey Dinges, a water projects analyst from the National Audubon Society. Our membership has been very active, not only in addressing the problems of each project, but also in recommending viable alternatives.

In light of serious economic, environmental, and Canadian concerns surrounding the Garrison diversion unit in North Dakota, in addition to growing citizen opposition, the National Audubon Society respectfully recommends that this project receive zero funding for fiscal year 1982.

At this point I might point out that it is our understanding that as of March 26, $8.7 million from the fiscal year 1980 supplemental remains unobligated on this project. So the administration's $4 million request seems unnecessary. And certainly the request of the Garrison promoters last week for an additional $7 million seems totally out of line with fiscal restraint and our commitment to Canada.

The 250,000-acre authorized Garrison project, now well past the $1 billion mark, would irrigate only six-tenths of 1 percent of North Dakota's agricultural land, yet would involve taking 220,000 acres of land just for the development of project features.

Project develepment, even with wildlife habitat mitigation, would result in the greatest single unit loss of prairie wetlands in North Dakota history—over 70,000 acres of prime waterfowl marshes. Moreover, Garrison diversion would destroy or degrade 13 congressionally authorized national wildlife refuge areas, an unprecedented loss in the history of U.S. water development.

Canadian citizens, as you have heard here, have long objected to the introduction of polluted return flows, rough fish, and other foreign biota to the Hudson Bay watershed that would result from Garrison operations in violation of our bilateral accord with Canada, the 1909 Boundary Waters Treaty.

Of more recent and noteworthy concern is the growing grass roots opposition afoot in North Dakota. During the past year, Barnes County successfully withdrew from the conservancy district and other counties, Wells County being one, are expected to follow.

O'Neill Unit, Nebraska—Opposition

Like Garrison, the O'Neill unit has been the target of growing local opposition. A majority of Nebraska citizens in all three congressional districts who have an opinion are opposed to O'Neill and, accordingly, the project has only one proponent in the Nebraska congressional delegation.

The reasons for State and National opposition are clear. Project costs, currently $335 million, have risen a dramatic—maybe that is not as dramatic a word as I can give it—50 percent in just 1 year. During this same interval, the benefit-cost ratio slipped from 28 percent, from 2.1 to 1.5 to 1. This benefit-cost ratio, computed at an artificially low discount rate, has itself come under fire. Mr. Mark Johnson concluded in the Nebraska Journal of Economics and Business, "Based on reasonable standards of economic efficiency and equity, the O'Neill is a bad bargain for the general public."

The most startling development surrounding O'Neill is that half of the 77,000 acres slated to receive project irrigation waters have already been convented from dry land to center-pivot irrigation and all, I might add, without Government intervention. Some 30,000 acres of land, affecting nearly 300 farmers and ranchers, would be taken for construction of project features. O'Neill's per acre investment, one of the highest in the Nation, $4,120, has risen by 69 percent in just 2 years.

I would like to just add a couple more comments regarding the economics of the Garrison unit dam.

In just 1 year project costs have risen by $183 million. That is well above the entire Federal expenditure to date, which is $157 million. Since fiscal year 1980, project costs have escalated an astounding 38 percent. In that same time, Garrison has gone from being 20 percent complete to 15 percent complete, and moreover, the benefit-cost ratio has plummeted from 2.0 in fiscal year 1980 to 1.1 today. That is a 45-percent decrease in projected benefits. I might add again that this benefit-cost ratio was computed with an artificially low discount rate of 3.225 percent.

We are talking about a billion dollars to irrigate six-tenths of 1 percent of North Dakota's agricultural land, not to mention the hundreds of millions of dollars of damage that it would impose on Canada.

The Reagan administration's $4 million budget for Garrison appears unnecessary, and the Garrison promoters' request for an additional $7 million would, in the view of the National Audubon Society, be a cavalier use of taxpayers' dollars.

Thank you very much.

WATER AND ENERGY ISSUES

Mr. Crow. Mr. Blackwelder?

Mr. Blackwelder. I have a letter here from a representative in the Utah State legislature on the Central Utah Project which I would like to have included in the record.

Mr. Crow. Without objection, it will be included.

[The letter follows:]

LETTER FROM W. ROBERT PHELPS, STATE REPRESENTATIVE FROM THE STATE OF UTAH

MARCH 19, 1981.

Senator MARK HATFIELD,
Energy, Water Development Subcommittee on Appropriations,
Washington, D.C.

DEAR SENATOR HATFIELD: I am currently serving in the Utah House of Representatives, having served twice previously. I also have been active, for the past 35 years in wildlife and natural resources conservation in the State of Utah.

While I am very much in favor of water conservation in the West and for what the Central Utah Project is doing, I have some grave reservations about the practibility of the trans-basin water transfer of the Bonneville Unit. I feel that the costs of this segment of the project are too high for the amount of water transferred. This water involved can be used to good advantage in the Uintah Basin.

Very sincerely,

W. ROBERT PHELPS,
State Representative.

Mr. BLACKWELDER. I would point out in my statement there are eight appendices, fairly brief appendices, but I think they provide relevant information to the committee about a number of issues that have been discussed earlier today, from basic audits to a list of GAO reports to a list of water projects which would drown out producing oil and gas wells and coal reserves and a listing of water conservation measures and demonstrating the dollar savings for consumers and concluding up with a listing of the job and energy impacts of expenditures in the water development area. I hope that all of this could be made a part of the record.

I think that would conclude my testimony.

Mr. CROW. Thank you very much. We will make all of these items and your full statements a part of the record at this point.

[The statements follow:]

JOINT STATEMENT OF ED OSANN, COORDINATOR, NATIONAL WILDLIFE FEDERATION, AND JIM ELDER, WASHINGTON REPRESENTATIVE, SIERRA CLUB, FOR COALITION FOR WATER PROJECT REVIEW

Mr. Chairman and Members of the Energy and Water Development Subcommittee on Appropriations, we would like to thank this committee for the opportunity to address you considering the FY 82 appropriations in the area of water resources. We are representing today the Coalition for Water Project Review to which some 20 conservation organizations belong, with a total membership of over five million.

For a number of years, conservationists have been testifying about our concern over the direction of water policy in this country. Attempts at reform have been largely stalemated despite the general awareness of numerous problems with these programs by the public. We believe the failure of Congress to pass an authorizing bill during the last four years is an indication of the public's concern for the inadequacies of the water resources program. Clearly, if any one thing became apparent after the last election, it was this disillusionment of the electorate about wasteful government spending at all levels.

The various appropriations committees are going to have to make some hard decisions. Budget cuts have been deep; we can probably look forward to more in the near future. There is no better time than now to start reform by simply using some of the options available to this committee at this time. Specifically, this committee can and should employ the following criteria to evaluate projects before appropriating further funds.

(1) All projects should be in strict compliance with applicable state and federal laws. Federal environmental policy such as the National Environmental Policy Act, the Clean Water Act, Fish and Wildlife Coordination Act, Floodplain and Wetlands Executive Orders and so on, should determine which projects are considered for further appropriations by the committee.

(2) Projects which don't measure up to a cost/benefit analysis using the current federal discount rates should be cancelled unless the users agree to fully reimburse the federal government all construction and maintenance costs.

(3) The committee should not fund projects in the absence of a supporting concensus by all affected state and local government and members of the state Congressional delegations.

There is no doubt that the public wants substantive changes regarding how their tax dollars are spent. We believe that in the long run these changes will be made because the American people demand it. There is simply no other prudent direction, but to start consistent federal water policy. We urge this committee to take the lead.

There is little question that water resource conservation and development is an important part of our agenda as a nation; there is little choice for us but to pursue a water policy so that we can address our problems as a nation, rather than as an individual or local interest. To do so, it is going to require reform in many areas including, to a large extent, major initiatives in the areas of conservation and non-structural alternatives.

For example, we believe that change in the areas of water conservation is desperately needed. The prognosis for water supply in many heavily populated areas or in those areas that are receiving large population shifts is in many cases, grim.

Even if the current drought goes away soon, we all know that there will be another one somewhere down the line that will wreak havoc with our economy. The Ogallala acquifer, a major source of water for Texas, Kansas, Nebraska, Colorado, Oklahoma, South Dakota and Wyoming is being unnecessarily pumped dry for agricultural use in these areas -- areas which are contributing substantially to our favorable balance of trade in agricultural commodities.

When asked why the obvious is ignored in a water resources budget that exceeds four billion dollars, the answer is simple. The Appropriations Committee is being asked, in many cases, to fund projects concerned with local interests at the expense of national interests and goals. Clearly, the legislation before this committee constitutes an agenda developed in the 1940s, 50s and 60s. Certainly, the $ 4 billion in title II and III do not represent a concerted federal effort to address current pressing national needs.

As noted recently by the Environmental Policy Center, over three hundred water projects are funded in the Carter budget, just six of these involve three-quarters of a billion dollars for FY 82: Tennessee-Tombigee Waterway (authorized 1946) $204 million; Central Arizona Project (authorized 1968) $191.5 million; Red River Waterway (authorized 1968) $120 million; Dam 26 (authorized 1978) $87 million; Russell Dam (authorized 1966); Central Utah Project (authorized 1956) $70.7 million -- total $755.2 million.

To complete these projects will require outlays of about a billion dollars a year for the next several years, and this will amount to about 40% of the total construction budget. These projects consume a disproportionate amount of money for local interests and deny the general public a national water direction which could benefit the entire nation by addressing current and future national needs. In each of the cases of the above-mentioned projects, they are either not needed or there are less expensive or less environmentally damaging alternatives. In the case of Locks and Dam 26, repair of a facility, an extension of an auxiliary lock, could be done for one-tenth the cost of a new facility.

Simply stated, the Appropriations Committee will be unable to undertake the necessary reform measures needed for a national policy as long as so few local projects consume such a large portion of monies of the funding available. In addition, the O&M cost of the projects already completed are substantial, reaching over a billion federal dollars a year with little cost recovery.

President Reagan has proposed a budget that would cut some $375 million from the original FY 82 resource budget. Only $230 million in cuts involve construction, half of which results in the termination of three Corps projects.

Most of the remaining money proposed by the administration to be cut involves such things as recreation features which are considered an economic benefit. We believe that recreation in many cases has indeed been an inflated claim. And in some cases this claim is totally unfounded. An example would be the Richard B. Russell dam where flat water recreation is claimed as a benefit. This dam will be located between Lake Hartwell and Clark s Hill. Both reservoirs still have not reached their recreational capacity despite claims by the Corps that they would. Yet part of the rationale for building Richard B. Russell (and many other projects) was based on recreational benefits. Project costs have been allocated on this basis; failure to complete recreational features will result in either an increase in cost allocated to power users or further subsidy to these power consumers.

A national Water Conservation Program has enormous potential, yet such programs have hardly been given any attention. Figures developed by the Water Resources Council, Commerce Department, GAO, and Congressional Research Service in the residential, industrial and agricultural sectors would indicate clearly that conservation should play a major role in our national water policy. At the very least the Appropriations Committee should use the existence of such a program as a way of selecting priorities.

If basic water conservation devices were used in the residential sector, a savings of 25-55% can be expected. The agricultural sector suffers from a long list of problems such as over-watering, lack of irrigation schedules, and water subsidies to raise surplus crops. In order to protect the substantial federal investment in water supply projects, this subcommittee should exercise annual oversight of the water conservation program -- if any -- for all water supply projects budgeted for construction.

At this time, there exists a whole new agenda which Congress will face in the near future: coalports, inland waterway dredging, irrigation and flood control legislation are being pushed by their respective interests. But unfortunately, in most cases, there is little process to establish what should be the priorities based on national needs.

You have the opportunity this session, with the blessing of the American taxpayer, to begin to establish this direction.

It's important to discuss these specific problems with our water resources program. Without a doubt, an independent water project review is needed. Significantly, the Water Resources Council, which is supposed to be charged with this responsibility, has never been really funded to be effective in this area. We are not making a case for the Water Resources Council per se, but rather for some agency to undertake this responsibility: OMB, the office of the Inspector General or alternative locations. It simply makes good sense; no successful business in the private sector would operate without some type of quality control.

In light of some of the audits by the Inspectors General of the Department of Interior which have shown mismanagement of five river basin accounts, costing the taxpayer billions; numerous GAO reports during the last decade of water projects pointing to inflated benefit claims; and the indictment and conviction in federal courts of contractors doing river maintenance work for the Corps of Engineers during the last two years -- the case is extremely strong for more audits and independent review of the public works program. The scope and size of the subsidies for some of the reclamation projects are staggering. A recent GAO report, March 3, 1981 entitled "Federal Charges for Irrigation Projects Reviewed Do Not Cover Costs," illustrates very clearly the taxpayers' involvement in these subsidies.

An example in central Nebraska is the North Loup Division Pick-Sloan Missouri River Basin. The projected costs of this project in 1978 was $131.6 million. Today the projected cost is over $200 million; however, only $27.3 million will ever be returned to the United States Treasury by the irrigators. North Loup is budgeted for FY 82.

Another example is the Interior Department's irrigation project near the Oahe Reservoir in the Missouri river basin that will benefit 80 farmers. The GAO found that the project was a massive subsidy that will never be fully repaid. Users of the Pollock and Herreid project will pay $3.10 per acre/foot while the true cost will be $130.50 per acre/foot. In all, the report cited 6 projects under construction by Interior's Water and Power Resources Service that produced similiar findings. Taxpayers are footing huge bills to provide irrigation water for a relatively few farmers.

There is at present a historic opportunity for this committee to establish national direction. Your decisions made concerning over 300 water resources projects can have a far reaching effect on future legislation initiated by the authorizing committees. If projects with inflated cost/benefit analyses that are environmentally destructive and have no national significance are funded, then we can expect that more projects will be authorized with regard to such criteria. The result will be that this appropriations committee will be dealing with more and more adverse public criticism which in turn may lead to continued involvement by the White House. On the other hand, if this committee, during this period of austerity, limits appropriations to those projects which are in the national interest, then a clear message will be sent to Congress about future water policy. That, in itself, would constitute a significant service to the nation.

STATEMENT OF CHARLES VERN DINGES, NATIONAL AUDUBON SOCIETY

SUMMARY

In light of serious economic, environmental, and Canadian concerns surrounding the Garrison Diversion Unit in North Dakota, in addition to growing citizen opposition, the National Audubon Society respectfully recommends that this project receive zero-funding for FY 1982.

The 250,000 acre authorized Garrison project, now well past the one billion dollar mark, would irrigate only 6/10ths of one percent of North Dakota's agricultural land yet would involve taking 220,000 acres of land for development of project features.

Project development, even with wildlife habitat mitigation, would result in the greatest single unit loss of prairie wetlands in North Dakota history--over 70,000 acres of prime waterfowl marshes. Moreover, Garrison Diversion would destroy or degrade thirteen congressionally authorized National Wildlife Refuge areas, an unprecedented loss in the history of U.S. water development.

Canadian citizens have long objected to the introduction of polluted return flows, rough fish, and other foreign biota to the Hudson Bay watershed that would result from Garrison operations in violation of our bilateral accord with Canada, the 1909 Boundary Waters Treaty.

Of more recent and noteworthy concern is the growing grassroots opposition afoot in North Dakota. During the past year, Barnes County successfully withdrew from the Conservancy District, and other counties, Wells County being one, are expected to follow.

Like Garrison, the O'Neill Unit has been the target of growing local opposition. A majority of Nebraska citizens in all three congressional districts who have an opinion are opposed to O'Neill and accordingly, the project has only one proponent in the Nebraska Congressional delegation.

The reasons for state and national opposition are clear. Project costs, currently $335 million have risen a dramatic 50% in just one year. During this same interval, the benefit-cost ratio slipped some 28% from 2.1, to 1.5 to 1. This benefit-cost ratio, computed at an artificially low discount rate, has itself come under fire. Mr. Mark Johnson concluded in the Nebraska Journal of Economics and Business, "Based on reasonable standards of economic efficiency and equity, the O'Neill is a bad bargain for the general public."

The most startling development surrounding O'Neill is that half of the 77,000 acres slated to receive project irrigation waters have already been converted from dryland to center-pivot irrigation and all without government intervention. Some 30,000 acres of land, affecting nearly 300 farmers and ranchers would be taken for construction of project features. O'Neill's per acre investment, one of the highest in the nation, $4,120, has risen by 69% in just two years.

Mr. Chairman and members of the committee, it is again a privilege for me to be here and I appreciate the opportunity to testify at these important hearings on two projects of major concern to the 415,000 member National Audubon Society, the Garrison Diversion Unit in North Dakota and the O'Neill Unit in Nebraska. I am Casey Dinges, a water projects analyst for National Audubon. Our membership has been very active not only in addressing the problems of each project, but also in recommending viable alternatives.

GARRISON DIVERSION

THE PROJECT

The Garrison Diversion Unit is a Water and Power Resources Service (WPRS, formerly Bureau of Reclamation) project in North Dakota primarily intended for irrigation development on 250,000 acres of land. Benefits are also claimed for fish and wildlife enhancement, municipal and industrial water supply, and recreational development. Authorized in 1965, the project is now 15% complete, although according to the WPRS, Garrison was 20% complete just two years ago.

ECONOMICS

As inflation continues to boil at a double digit pace, the American people now look to a new Administration and the 97th Congress to cut federal spending. Entangled in a web of environmental destruction, international controversy, and the wrath of an ever-growing contingent of North and South Dakota farmers, the Garrison Unit stands, rather conspicuously, as a national symbol of fiscal waste. Skyrocketing project costs, currently 1.018 billion, have increased nearly 500% since the 1965 authorization.

In just one year project costs have risen by $183 million, well above the entire federal expenditure to date ($157 million). Since FY 1980, project costs have escalated from $738 million to $1.018 billion, an astounding 38 precent increase in total costs. During that same period Garrison has gone from being 20 percent complete to 15 percent complete and moreover, the direct benefit-cost ratio has plummeted from 2.0 in FY 1980 to 1.1 today, a 45 percent decrease in projected benefits. One should note that this benefit-cost ratio was computed with an artificially low discount rate of 3.225 percent.

Assuming that 1300 farmers will irrigate, the federal government's per acre investment breaks down to $3,320, which amounts to a subsidy of $638,000 per farm unit. These irrigators, however, will repay less than 3¢ of every dollar the taxpayers spend on Garrison.

A billion dollars to irrigate 6/10ths of 1% of North Dakota's agricultural land, and yet 220,000 acres of land, most of which is now productive farmland, will be taken for project features that will serve only 250,000 acres. Eight million and seven hundred thousand dollars from the FY 80 Supplemental remains unobligated because of our commitment to Canada. The Reagan Administration's $4 million budget for Garrison appears unnecessary, and the Garrison promoters' request for an additional $7 million in FY 82 seems totally out of line with fiscal restraint and our Treaty commitment.

CANADIAN OPPOSITION

The transboundary implications of the Garrison Diversion Unit have been of concern to Canada since the early 1970's. Canadians feared that polluted irrigation return flows from the project would adversely impact water quality in rivers flowing from North Dakota to Canada. In addition, fears were expressed that project waterways would introduce rough fish and other foreign biota into the Hudson Bay watershed.

The issue was referred to the International Joint Commission. The IJC's Final Report, released in September of 1977, concluded that the Garrison project "would cause significant injury to health and property in Canada as a result of adverse impacts on the water quality and on some of the more important biological resources in Manitoba" (IJC/FR p.105). This would be a violation of the 1909 Boundary Waters Treaty between the United States and Canada.

There is no doubt that the introduction of polluted return flows, rough fish and other foreign biota to the Hudson Bay watershed would have an adverse impact on Canada's multi-million dollar fishing industry in Lakes Winnipeg and Manitoba. A 1979 report prepared for the Manitoba Indian Brotherhood estimates the present value of all future losses to range from a low of $30 million to a high of $281 million.

The IJC recommended that those portions of the project affecting Canada "not be built at this time" (IJC/FR p.121). The State Department has taken the position, without deviation, that the U.S. will honor its treaty commitments to Canada. The IJC's verdict is in, the Canadian position is clear, and the Congress should act in a manner consistent with our treaty obligations to Canada.

Garrison was, indeed, a topic of discussion during President Reagan's recent trip to Ottawa, as it was between Jimmy Carter and Prime Minister Trudeau during the Venice Summit last year.

ENVIRONMENTAL IMPACTS

North Dakota's unique landscape of shallow alkaline lakes, sloughs, prairie marshes and potholes provide ideal breeding, feeding and resting areas for an immense number and variety of geese, ducks, shorebirds, gulls, and other wildfowl. North Dakota produces more ducks annually than any other state excepting Alaska.

The Garrison project, once claimed to benefit wildlife, would have a devastating impact on prairie marshes, National Wildlife Refuges and their associated wildlife.

The Garrison Unit would result in the greatest single unit loss of prairie wetlands in North Dakota history--over 70,000 acres of prime waterfowl marshes. In addition, the project will destroy or damage thirteen congressionally authorized National Wildlife Refuge areas--more than any other water project in the nation's history. These refuges are located on the critical Central Flyway for North American Birds.

The U.S. Fish and Wildlife Service is on record saying that Garrison's 146,000 acre wildlife mitigation plan will not offset quantifiable losses to wildlife habitat. These quantifiable losses would actually require 197,000 acres of habitat replacement, an impossibility under the present authorization. This figure does not include unquantified impacts such as loss of habitat resulting from stream channelization.

In view of the aforementioned impacts on fish and wildlife resources in North Dakota and Canada, the North Dakota Chapter of The Wildlife Society, went on record last year calling for a complete halt to the project.

ENERGY

Since energy is of national importance, it should be noted that the Institute of Ecology reported in 1975 that, "in terms of relative energy efficiency, the energy input per acre for the Garrison Diversion Unit is nearly nine times the national average for irrigation." In addition, the Institute concluded that, "the total energy cost of construction of the Garrison Diversion Unit is equivalent to 231 million gallons of diesel fuel or 259 million gallons of gasoline."

THE O'NEILL UNIT

THE PROJECT

The proposed O'Neill Unit on the Niobrara River in North Central Nebraska is a Water and Power Resources project intended for irrigation on 77,000 acres of already productive farmland. The project, just 2% complete, has absorbed only $6.5 million. O'Neill will provide no flood control, no power generation, and only minimal recreational opportunities.

ECONOMICS

Since 1968, project costs have increased nearly five-fold from $72.5 million to the current figure, $335 million. During the last year alone project costs have shot up an astronomical 50%. It is imperative to note that on roughly one-half of 77,000 acres slated to receive project waters, farmers have already developed center-pivot irrigation systems without government intervention. In other words, the O'Neill Unit will utilize some 30,000 acres for the construction of project features; however, only half of the original 77,000 acres in this plan would need irrigation waters. The WPRS, in its benefit-cost ratio, still assumes benefits from increased production on 77,000 acres. The use of an exceedingly low discount rate, 3.25%, which greatly understates costs and exaggerates benefits, casts further doubt on the project's economic viability.

Like the Garrison project, irrigators under the O'Neill plan will repay only a small fraction (14%) of the benefit provided to them with public dollars. In theory, most of the benefits will be repaid under the Pick-Sloan plan for power usage; however, a July 1978 audit investigation by the U.S. Department of Interior raised serious questions about the payback provision of the entire Pick-Sloan plan. The final conclusion of the auditor was "that the financial posture of the Pick-Sloan is at best based on an uncertainty. At worst, it is based on an unreality. The net effect is that no one knows within reasonable limits of accuracy what rates to charge power users and M and I water users to repay Pick-Sloan costs. To remedy this condition, the entire Pick-Sloan needs to be reassessed in terms of what facilities will be built and in what time frame."

As with Garrison, O'Neill would involve an incredibly large subsidy--$826,000 per farm assuming the WPRS's typical farm unit of 200 irrigated acres--to a relative handful of individuals, 1400. Yet about 300 landowners and ranchers will be adversely impacted. The irrigation investment per acre has jumped 69% in two years to $4,120, one of the highest for any reclamation project in the nation. "Based on reasonable standards of economic efficiency and equity," Mr. Mark R. Johnson concluded in the Nebraska Journal of Economics and Business, "the O'Neill Unit is a bad bargain for the general public."

ENVIRONMENTAL IMPACTS

Apart from the inescapable deficiencies in O'Neill's economic analysis, this project would engender the irreversible destruction of one of Nebraska's most scenic and ecological treasures, the Niobrara River. This last free-flowing river in Nebraska is so cherished that rural landowners east of Valentine, Nebraska, have initiated a proposal to incorporate a 47-mile stretch of the Niobrara into the National Wild and Scenic Rivers system. The project area is a unique habitat where eastern, western, northern, and southern species can all be found.

POLITICAL FACTORS

Roundly criticized from a national perspective, O'Neill enjoys very little support within Nebraska. A majority of Nebraska citizens in all three congressional districts who have an opinion are opposed to the project. This is evidenced by polls and questionnaires conducted by the Omaha World Herald, the Lincoln Star, and Congressman Bereuter. The Nebraska Tax Limit Coalition, which communicates with 30,000 to 40,000 citizens through newsletter mailings in Nebraska, recently announced that it will "actively oppose tax expenditures" for the Norden Dam, a primary project component.

CONCLUSION

Garrison Diversion is a quagmire of controversy slowly spreading across the prairie of the northern Great Plains. Garrison is a litmus test for how far an ill-conceived water project can proceed before the populace--be it North Dakota farmers taxpayers, conservationists, or Canadians--rises up to demand a halt to such fiscal waste.

Considering the O'Neill Unit's glaring lack of statewide support, in addition to its weak economic justification, one must call into question the wisdom of the Administration's $3.3. million budget request.

Assuming that the President's Program for Economic Recovery depends upon public acceptance it is, I believe, incumbent upon this Committee as the taxpayers' guardian to recommend to the full Committee that in view of the controversial circumstances surrounding both authorized projects, the Garrison Diversion Unit and the O'Neill Unit should be zero-funded in FY 1982.

STATEMENT OF BRENT BLACKWELDER, WASHINGTON REPRESENTATIVE, ENVIRONMENTAL POLICY CENTER

My name is Brent Blackwelder and I am a Washington Representative of the the Environmental Policy Center, a national conservation organization which specializes in energy and water resource issues. I have worked on water resource issues for over ten years and have observed the Congress and the Executive Branch in their handling of water development questions.

While many serious water resource problems confront our nation, the present program of water development does not match that need. A significant portion of the money now spent for water projects is not well spent. Far too many projects are being built which are neither cost-effective nor the best solutions to real problems. First, I wish to describe some of the deficiencies of the present program. Second, I will suggest various budget cutting strategies to save between $500 million and $1.2 billion. Third, I will outline alternatives to the present program which are most cost-effective, more job-intensive, and less socially and environmentally disruptive.

Deficiencies in the Present Program

Audits. Audits of five river basin accounts during the past three years by the Inspector - Generals of the Interior Department have revealed patterns of unbusinesslike practices and mismanagement which will cost the taxpayers many billions of dollars. The audit of the Central Valley Project in California projects that the account will be $8.8 billion in the red at the end of the repayment period. Consumers of hydropower from Army Corps of Engineers' dams in Texas, Missouri and Arkansas have gone for more than twenty years without a rate increase. The Missouri River Basin account is so out of kilter that required repayment will not be completed until the 22nd century. (A summary of findings from these audits is presented in Appendix I.)

G.A.O. Reports. We have submitted in Appendix II a list of G.A.O. reports on water development projects of the Corps, Water & Power Resource Service (WPRS), Soil Conservation Service (SCS), and TVA during the past decade. In 1974 G.A.O. issued a comprehensive report on the failure of water development agencies to develop accurate benefit-cost ratios, citing the systematic understatement of costs and overstatement of benefits. Although G.A.O. recommended a series of remedial actions, it found, four years later when it examined another group of projects,that the Corps, Bureau of Reclamation and Soil Conservation Service had not reformed the evaluation process.

Social Displacement. A number of water projects of the Corps of Engineers and WPRS force rural residents off their land against their will. Contrary to the requirements of the Relocation Act, adequate replacement housing and farms are not available. The Stonewall Jackson Dam Project of the Corps in West Virginia is forcing 1800 people off their homes and farms. The Environmental Policy Center examined the situation and found that proper replacement housing and farms are not available. The O'Neill Unit of the WPRS in Nebraska is an irrigation project which would benefit several hundred farmers at the expense of several hundred other farmers who would lose some or all of their land for the dam and irrigation features of the project. To add insult to injury, those people who would lose their land were prevented from voting on the issue because their land was not officially part of the irrigation-conservancy district. The Narrows Project in Colorado would benefit one group of irrigators at the expense of another who would lose some of all of their farms.

Projects Drown Energy Reserves. Several projects in the Reagan budget involve the drowning of oil, coal and gas reserves whose value has not been properly considered by the Corps of Engineers. The Stonewall Jackson Dam would inundate coal, oil and gas deposits. The Skiatook Dam in Oklahoma would drown an area which produced 182,000 barrels of oil in 1978 and eleven million cubic feet of gas. The Interior Department estimates that the Candy and Skiatook Reservoirs would flood out areas which produce 780 barrels of oil a day and which have, at a minimum, $800 million worth of oil still to produce. (Appendix III provides more information.)

Flood Control. The major argument offered by the Corps in defense of its flood control projects is that these projects have prevented more in damages than they cost to build: that is, $15 billion has been spent and over $60 billion in flood damages has been prevented. This argument is not valid for it assumes that in the absence of Corps projects, nothing else would have been done. Second, much of the damage prevented is to structures which were not in the flood plain when the project was built but were built after project completion. Unfortunately, the rare or unusual flood comes along and wipes out many structures which supposedly were protected by a federal project. Thus, the nation's flood damage bill is getting much worse despite the billions spent on flood control. The Environmental Policy Center submits that an entirely different approach to flood control is required if we are to reduce the annual flood damage bill.

Cost Effectiveness. A major problem with the present water development program is that it does not produce the most cost-effective solutions to problems. Take municipal water supply as an example. It is well-known that new plumbing fixtures for toilets, showers and faucets, together with leak repair, can cut residential usage in homes and apartments by 38-68%. These fixtures pay for themselves within three months, and a family of four can save up to $400 a year on their water, sewer, and hot water heating bill by installing these devices. Even though a retrofit program with these plumbing fixtures would cost a fraction of new water supplies, the Federal Government finds itself in the business of building new reservoirs for communities which have not taken the slightest step to improve efficiency in their use of water. (See Appendix IV for a description of such an efficiency program and the related savings.)

Irrigation, Drainage, and Surplus Crops. The Federal Government is trapped in fundamentally contradictory policies between its irrigation and drainage programs and its price support program. On the one hand, the Department of Agriculture has provided throughout the 1970's various price support and set aside programs because abundant production was depressing farm prices. On the other hand, the WPRS is proceeding with irrigation projects to increase crop production of a number of those very crops that have regularly been receiving price supports. According to Professor Thomas Power, Chairman of the Economics Department at the University of Montana, the Central Arizona Project--the most expensive ongoing reclamation project--involves a subsidy of $1.383 million per farm to be benefited. 73% of the irrigated acreage in Central Arizona is growing crops which have eligible for federal set-asides and price support. Vegetables and citrus fruit are actually grown on less than 7% of the irrigated land. (See Appendix V for details.) Thus, the taxpayer is hit coming and going. The same types of argument apply to drainage projects of the Army Corps and SCS which have the effect of increasing crop production. Over twenty million acres of bottomland hardwood have been lost in the Lower Mississippi Basin to clearing and drainage, but federal drainage projects continue.

Limited Beneficiaries. In October 1980, the G.A.O. reported that a number of water projects of the Corps, WPRS, and SCS provided large benefits to a limited number of landowners or corporations. These major beneficiaries were not, however, required to pay an additional share of the project cost. For example, the Hendry County Drainage Project in Florida would benefit 21 landowners at a federal cost of $13.190 million. Four of the landowners control 60% of the benefited area. Thus, roughly two million dollars per landowner of federal tax money is being spent on each of these four landowners. The G.A.O. report noted that a number of SCS projects were providing small lakes for private developers to sell off homesites. (See Appendix VI for details.) In tight budget times there are far better ways of spending tax dollars.

Contractor Fraud. During the past two years, widespread fraud has been established by a series of indictments and convictions in Federal Court by contractors doing river maintenance work for the Corps of Engineers on the Missouri, Red, and Lower Mississippi Rivers. Many of the same contractors who have pleaded guilty or been convicted continue to receive contract awards from the Corps. (See Appendix VII for details.)

Budget Cutting Options

The Reagan Administration is now proposing a cut of about $300 million for the Army Corps and WPRS out of the January Carter budget of $4.28 billion for the two agencies. About $220 million of the $300 million will come from the construction budgets. While the Reagan construction budget is 8.4% below the Carter budget for FY 82, it represents a 1.4% increase over FY 81 construction appropriations. We find the increase in absolute dollars of this program--while other programs are being slashed dramatically or eliminated--inconsistent with Reagan's goal of eliminating government waste. The Administration's fact sheet on the budget states as an objective:

> Capital investments in public sector programs--such as highways, waste treatment plants and water resource projects--must be stretched out and retargeted.

We do not see much stretching out or retargeting in the water resource area.

The Administration's cut is clearly inadequate to eliminate the waste involved in the water development program. We propose that the Congress make cuts of up to 1.2 billion. Here are several ways to achieve an additional reduction of between $500 million and $1.2 billion:

1. Make an additional across-the-board cut of 12%, bringing the total program reduction to 20% = $820 million savings.

2. Eliminate funding for the following four projects:

	Savings
Tennessee-Tombigbee Waterway (AL/MS)	$201 million
Russell Dam (GA/SC)	82
Central Arizona Project	186
Central Utah Project	66
total	$535 million

This option would still leave several hundred other water projects unaffected.

3. Eliminate half of the funding for the above four projects for a savings of $267 million and get another $250 million by an across-the-board reduction of 6% = $517 million.

4. There are over 2 dozen other projects which should be eliminated for economic and environmental reasons. Cutting funding for these projects would save $280 million in fiscal 1982.

5. Repair the present Lock 26 on the Mississippi River and extend the auxiliary lock instead of building a brand new facility whose cost is sure to exceed one billion dollars. This alternative could be accomplished for a tenth the cost and would save $900 million dollars over the next decade. Furthermore, it would provide quicker relief to barge operators who ironically have opted instead for a new facility.

6. Designate 50 projects as priority and do not cut these. Make a 25-30% cut in the remaining projects.

While we strongly support the Administration's proposed termination of the Red River Waterway in Louisiana and the Yatesville Dam in Kentucky, we do not see any other Administration cuts significantly reducing the pork barrel in this program. Instead Reagan has asked to chop out the recreation components of many projects, thereby ignoring the fact that the economic justification of many projects depends on claiming a generous share of recreation benefits. If the Administration doesn't place much of the priority of producing more flat-water recreation benefits, we concur. But then why proceed further with construction of those projects dependent on flat-water recreation benefits for their justification?

The Reagan cuts virtually ignore the waste in the WPRS budget. There are two multi-billion dollar projects in the WPRS budget: Central Arizona Project and Central Utah Project. Completion of these two projects will, in the judgment of the Environmental Policy Center, cause serious problems with Mexico because they will increase the salinity in the Lower Colorado. The United States is now building the world's largest desalting plant at Yuma, Arizona to treat salty discharges from one irrigation district. Extensive other water diversions planned throughout the Colorado Basin will aggravate the already serious salinity problems. A simple solution to the dilemma would be for the Basin States to sell through an interstate compact some of their share of Colorado River water to California. California would undoubtedly pay a healthy price for this water while the Basin States selling the water would surmount the "use-it-or-lose-it" problem and greatly increase their revenues at the same time. In tight budget times, much more imaginative solutions to water problems are called for.

Alternatives to Traditional Water Development

Spending money on dam building creates fewer jobs per dollar than practically any other federal program. If construction jobs are desired, then more jobs per dollar can be found constructing sewage plants or mass transit. (See Appendix VIII for details.) For each of the traditional purposes of water resource development, the Environmental Policy Center wishes to suggest alternative approaches.

Flood Control: Rely on nonstructural approaches which consist of flood plain zoning and management, flood proofing of structures, flood warning systems, relocation out of the hazard zone, flood plain greenbelts and recreation zones, and protection of upstream wetland areas which serve as natural storage areas and hold back flood waters.

Water Supply: In the first part of this testimony various water saving fixtures for home and apartment were described. These efficiency improvements are far more cost-effective than constructing new supplies. If there is to be a federal role in water supply, we see it as facilitating these efficiency improvements rather than rewarding those communities which have done little to help themselves. In addition, there is an argument on the grounds of regional equity for providing aid to help older cities upgrade deteriorating water delivery systems which may be leaking huge quantities of water. Why subsidize the Central Arizona Project for Phoenix while denying aid to New York and Boston for fixing their water systems?

Navigation: Waterway user charges to recover all the operation and maintenance costs of operating the inland navigation system would be an important first step in eliminating pressurefor unnecessary facilities. We support the Reagan proposal of a 30¢/gallon fuel tax, but believe that this will not be sufficient to recover federal costs. Barges receive an incredible 43% of their operating revenues from the Federal Government as compared to less than 3% for rail and truck (according to the Congressional Budget Office). Lockage fees, ton-mile charges, congestion tolls, and segment tolls should also be employed to achieve full recovery of costs.

A realistic test of the economic worthiness of a proposed canal project would be the willingness of the prospective beneficiaries to put up front a portion of the capital required to build the project. At the present time, canal projects are not evaluated from the standpoint of whether they would provide advantage to our nation's transportation system. They are simply evaluated on the basis of whether they would provide savings to various shippers.

Recreation: Given the large number of federal, state, and private dams in the country (50,000 dams nationwide), we do not see any need for additional reservoir construction for the purpose of recreation. A number of reservoir projects have actually destroyed areas which provided a wide range of recreational opportunity without federal expenditure of money.

Irrigation: Many of the current irrigation projects involve large sums of money to benefit a few landowners; at the same time they force other landowners off their farms and ranches. Far too much of the land to be irrigated is, or would be, growing price supported crops. The reclamation program should be redirected to achieve greater efficiency in water usage and to improve its financial management so that water is not marketed at prices below the cost of delivery.

Hydropower: While hydropower dams possess some significant advantages over fossil fuel and nuclear plants, a number of hydropower projects in the budget are not sound investments. For example, spending the same amount of money insulating attics in the Southeast would save twenty times the energy Russell Dam would ever produce and would create many more jobs. Given the existence of 50,000 dams in the country, 97% of which have no generators, the first place to look for hydro production is at these existing dams rather than the construction of new dams. The vast majority of projects in the water development budget produce no energy whatsoever; at the same time constructing them requires a lot of energy in comparison to most other federal programs. (See Appendix VIII.)

Conclusion

Cutting spending on water projects is an excellent place to start trimming the budget because the present program does not address real needs in a cost-effective manner. Unlike many other programs in the Reagan budget, the construction budget for water projects represents an increase in absolute dollars over last year. Audits and independent reports have documented mismanagement of the program in staggering proportions and have revealed a wide range of unbusinesslike pactices which cost taxpayers dearly. There are many options to the traditional approaches to water development which I have briefly outlined. A major budget cut in this program would be a signal that business-as-usual is no longer going to be tolerated.

Appendix I

AUDITS SHOW UNBUSINESSLIKE MANAGEMENT OF WESTERN BASIN ACCOUNTS

The following is a list of Audits by the Office of the Inspector General in the Department of Interior that have been conducted on certain projects in which the Western Area Power Administration operates as the Federal Power Marketing Agent:

- The Central Valley Project (CVP)
- Pick-Sloan Missouri Basin Program
- The Fryingpan-Arkansas Project
- The Central Arizona Project
- The Colorado River Storage Project and Related Individual Participating Projects

KEY CONCLUSIONS OF THE AUDITS

THE CENTRAL VALLEY PROJECT

Interior's audit report disclosed that revenue and repayment prospects for all reimbursable functions of the Central Valley Project in California are in serious financial trouble now and for the forseeable future unless basic operating policies, contracts, and possibly laws are changed. The report indicated the rates for hydroelectric power from the Central Valley Project must be raised substantially or the project could face an estimated $8.8 billion deficit by the year 2028--the point when it is supposed to break even.

PICK-SLOAN MISSOURI BASIN PROGRAM

Interior's audit report concluded that the financial posture of Pick-Sloan is, at best, based on uncertainty, and at worst is unrealistic. According to the report, no one knows, within reasonable limits of accuracy, what rates to charge power users and municipal and industrial water users to repay Pick-Sloan costs. As of September 30, 1976, the Federal Government had invested $2.4 billion in Pick-Sloan of which $1.9 billion must be repaid. Eventually, the repayment requirements are estimated to reach $5.8 billion.

THE FRYINGPAN-ARKANSAS PROJECT

The report identifies several areas in which cost allocation concepts and procedures have not been properly applied by the Water and Power Resources Service (WPRS) on this project. The recommended reallocation of project costs to correct these situations will increase reimbursable costs (Power, Municipal and Industrial Water, Irrigation) $69 million, exclusive of interest; and decrease nonreimbursable costs (Fish and Wildlife, Recreation, Scenery Conservation, etc.) a comparable amount. The projected end result of such reallocation, over the 50-year repayment period, is a repayment deficit of approximately $250 million considering the compounding effect on interest due the Treasury. This is a burden that the general taxpayer, rather than project beneficiaries, will have to bear in the absence of the necessary changes in water and power rates and the repayment contract.

THE CENTRAL ARIZONA PROJECT

The report discusses two Water and Power Resources Service (WPRS) decisions of 1972 which have a significant effect ($250,000,000) on the prices water users will pay for water from the CAP. When equitable repayment concepts, sound fiscal policy, good business judgment and, in our view, Congressional intent are considered, these decisions were not prudent in terms of protecting the public fisc.

We have recommended that the Department reverse these decisions. The actions recommended would require water customers, who directly benefit from CAP facilities, to repay a more appropriate share of Federal construction and financing costs. Otherwise, they will be relieved of an obligation to repay about $250 million of interest costs that will then have to be borne by the general taxpayers.

THE COLORADO RIVER STORAGE PROJECT AND RELATED INDIVIDUAL PARTICIPATING PROJECTS

One potential significant problem which requires management's immediate attention and resolution is the repayment status of the Bonneville Unit (BU) of the Central Utah participating project. The Water and Power Resources Service (Service) entered into a repayment contract in 1965 with the Central Utah Water Conservancy District (CUWCD) and agreed to contract provisions which explicitly limit CUWCD's repayment obligation to $156.8 million. Based on the Service's estimate to complete the project, this contractual limitation on reimbursable costs will preclude recovery of additional reimbursable costs of about $198 million. Although the Service forecasts that construction expenditures for BU will exceed contract repayment obligations in fiscal year 1981, necessary amendatory contract actions providing for repayment of the project cost increases have not yet been taken.

In the area of irrigators' ability to pay, we noted that the Service recently completed an analysis which shows that since the date the CUWCD executed its repayment contract, the ability to pay for irrigators in the project service area has increased from $16.4 to $69 million. While the $69 million is a preliminary estimate subject to change, the long term repayment contract nonetheless contains no provision for increasing repayment obligations to recognize substantial increases in ability to pay. When the CUWCD contract is amended to cover increased construction costs, the Service should at that time include contract language which insures that water rates paid by irrigators are based upon current periodic determinations of ability to pay.

Our review of the 1977 Power Repayment Study (PRS) disclosed that projected power rates are adequate to repay project costs. However, we determined that data used for the PRS understated interest costs on future replacements and additions, and understated participating project investment costs by about $185 million.

Appendix II

Congressional Guidance Needed on Federal Cost Share of Water Resource Projects When Benefits Are Not Widespread Nov. 13,1980 CED-81-12

Audit of Saint Lawrence Seaway Development Corporation, Calendar Year 1979 August 21, 1980 CED-80-117

Montana's Libby Dam Project: More Study Needed Before Adding Generators and a Reregulating Dam November 20, 1979 EMD-80-25

Congressional Control over Appropriations to the Corps of Engineers Can be Strengthened January 31, 1979 FGMSD-79-12

An Overview of Benefit-Cost Analysis for Water Resources Ptojects--Improvements Still Needed August 7, 1978 CED-78-127

Palmetto Bend Dam and Reservoir, Need for Improved Analysis of Alternative and Cost Data December 16, 1977 PSAD-78-43

The Tennessee Valley Authority's Tellico Dam Project--Costs, Alternative and Benefits October 14, 1977 EMD-77-58

Actions Needed to Increase the Safety of Dams Built by the Bureau of Reclamation and the Corps of Engineers June 3, 1977 CED-77-85

Benefits Claimed for the Corps of Engineers Catherine Creek Lake Project in Oregon August 31, 1976 CED-76-147

Federal Efforts to Extend Winter Navigation on the Great Lakes and the St. Lawrence Seaway--Status and Problems to be Resolved April 20, 1976 RED-76-76

Bureau of Reclamation's Procedures and Practices for Computing Authorized Cost Ceilings and Project Cost Estimates Need Improvement November 1975

Environmental and Economic Issues of the Corps of Engineers' Red River Lake Project in Kentucky August 15, 1975 RED-76-9

Revisions Recommended for the Benefit-Cost Analysis for the Planned Tomahawk Lake Project in Kansas July 2, 1975 RED-75-382

Economic Benefits and Costs of the Dickey-Lincoln Hydroelectric Project in Maine June 19, 1975 RED-75-387

Economic And Environmental Aspects of the Proposed William L. Springer Project, Illinois April 18, 1975 RED-75-363

Congress Needs More Information on Plans for Constructing the Garrison Diversion Unit in North Dakota November 25, 1974

Improvements Needed in Making Benefit-Cost Analyses For Federal Water Resources Projects September 20, 1974

Environmental and Economic Issues of Planned Construction of Spewrell Bluff Dam in Georgia June 13, 1974 B-177442

Improved Federal Efforts Needed to Equally Consider Wildlife Conservation with Other Features of Water Resource Development March 8, 1974

Questionable Aspects Concerning Information Presented to the Congress on Construction and Operation of the San Luis Unit, Central Valley Project Bebruary 12, 1970

Strengthened Cost Estimating Procedures Needed for Water Resources Projects January 24, 1973 B-167941

Computation of Flood Control Benefits for the Cascadia Reservoir Project, Oregon, not Adequately Supported September 19, 1972

Review of Tocks Island Reservoir Project October 1, 1969 B-164844

APPENDIX III

CORPS OF ENGINEERS PROJECTS WHICH WOULD INUNDATE ENERGY RESERVES

Several reservoir projects of the Corps would flood out producing oil and gas wells or drown recoverable coal reserves. None of the projects listed below has a sound economic rationale, and the value of the mineral reserves which would be lost or made difficult to recover has not been properly considered by the Corps in its economic analyses. In some cases no survey of reserves was even done by the Corps.

Projects	Cost	Reserves Present
Yatesville Dam (KY) (Reagan proposes to terminate Yatesville Dam.)	$93.8	100 million tons of coal of which 14.4 million is recoverable. Corps evaluated the coal as being worth zero. Five gas and two oil fields underlie the project area. Some have been producing since 1912 and hold 80% of their oil today.
Skiatook Dam (OK)	114.0	The reservoir area produced 182,000 barrels of oil in 1978 and 11 million ft^3 of gas.
Candy Dam (OK) (Not in FY 82 budget.)	28.1	350 producing oil wells are in the reservoir area. Together Candy and Skiatook areas produce 780 barrels of oil a day. 41 million barrels have been produced to date. Interior estimates 20 million more barrels can be produced worth $800 million.
Stonewall Jackson Dam (WV)	189.0	Corps valued coal in reservoir area at less than one million dollars. Independent assessment places value at over $15 million. Oil and gas wells are found throughout reservoir area.

TOTAL COST: $424.9 million

OSAGE TRIBAL COUNCIL

EFFECTS OF SKIATOOK AND CANDY CREEK LAKES ON THE OSAGE MINERAL ESTATE

By the Act of June 28, 1906 (34 Stat. 539), Congress reserved in trust for the benefit of the Osage Tribe all mineral interests underlying the surface lands within the Osage Indian Reservation.

By the Flood Control Act of October 23, 1962 (76 Stat. 1186), Congress authorized the United States Army Corps of Engineers to construct the following flood control projects which are wholly or partially located within the boundaries of the Osage Indian Reservation:

Project	Estimated Acreage Within Osage County	Status
Kaw Lake	8,406	Completed
Birch Creek	3,926	Completed
Skiatook Lake	20,000	Under Construction
Candy Creek	4,700	Under Construction
Sand Creek	6,200	Proposed
Shidler Creek	7,200	Proposed
Total Acreage	50,230	

The area of the Osage mineral estate that will be affected by Skiatook and Candy Lakes is in excess of 25,000 acres, which area has produced 33,800,000 barrels of oil through mid-1979. With existing technology and that which is in current state of development (enhanced recovery), it is well within reason to expect to recover in the future as much oil as has been produced to date from these known and proven producing areas. While other branches of Government, including the Bureau of Indian Affairs, Department of Interior, which has primary trust responsibility for the Osage mineral estate, are promoting domestic self-sufficiency in energy resources, the Corps of Engineers continues to inundate areas of known oil and gas reserves which are prime prospects for the application of primary, secondary, and enhanced recovery of hydrocarbons.

In addition, these areas include a substantial number of acres which have the potential for oil and gas production under existing conventional recovery methods. The area to be affected by these lakes was known to the Osage operators in the 1960's when the price of oil was $3 per barrel and there was no market for natural gas, thus even with substantial oil price increases the area has never responded to the nationwide increase in exploration and development. Osage oil and gas operators were reluctant to take substantial risks in developing oil and gas properties with the probability that these properties, in the near future, would be confiscated by the Corps of Engineers. As a result much of the acreage remains essentially unexplored, undeveloped, and nonproductive.

Absent the knowledge of the imminent construction of the lakes, this area, like all of Osage County, surrounding counties, and states, would have participated in the development and production boom that is now taking place.

CURRENT AND POTENTIAL LOSS FROM KNOWN PRODUCING AREAS

	Skiatook	Candy	Total
Acres	20,000+	5,000+	25,000+
Cumulated Oil Production-Bbls.	11,400,000	22,400,000	33,800,000
Current Oil Production-Bbls/yr	150,000	100,000	250,000
Current Gross Revenue-$/yr	6,000,000	4,000,000	10,000,000
Estimated Reserves-Bbls	12,000,000	25,000,000	37,000,000
Future Gross Revenue-$*	480,000,000	1,000,000,000	1,480,000,000
Potential Loss-$:			
Producer	263,780,000	542,874,000	806,654,000
Osage Tribe	76,000,000	158,335,000	234,335.000
State Taxes	32,000,000	66,666,000	98,666,000
Federal Taxes	108,220,000	232,125,000	340,345,000

* Based on current wellhead price for crude oil

> The above does not give any consideration to the potential loss from undeveloped lands to be inundated.

SUMMARY

If the lakes are allowed to be built, the Osage Tribe and current lessees will ask for damages in excess of $382 million for Skiatook Lake and $796 million for Candy Lake. In addition, the State of Oklahoma will lose over $98 million and the Federal Government, $340 million in tax revenue. These damages will completely invalidate the Corps of Engineers cost/benefit ratio formulas. Even more appalling will be the loss to the Nation as a whole of potentially 1 billion barrels of oil and uncalculated millions of cubic feet of natural gas.

All statistical information used to write this report is available from the Superintendent, Osage Indian Agency, Pawhuska, Oklahoma 74056.

APPENDIX IV

ENVIRONMENTAL POLICY INSTITUTE

WAYS FOR COMMUNITIES FACING DROUGHT TO REDUCE WATER USAGE SIGNIFICANTLY AT MINIMAL COST THROUGH RETROFITS & LEAK REPAIR

Retrofit and leak repair programs have successfully been carried out in San Diego, Marin County, Los Angeles, Montgomery County (Md), Elmhurst (Ill) and other cities and counties across the nation.

Four Plumbing Fixtures Can Save 38%-68% of Residential Water Use

1. Showerheads with 2.5 gallons/minute maximum flow: 15% reduction--new water saving showerheads give excellent showers while cutting water usage in the shower in half. Saving on the hot water bill can range from $60 to $200 a year for a family of four. Nationwide the savings in energy could total 130 million barrels of oil equivalent a year.

2. Toilet dams: 20% reduction--toilets account for 40-45% of residential usage in the house or apartment. Durable toilet dams can save 2 to 3 gallons per flush.

3. Faucet aerators: 3-4%--these devices cut unnecessary flows while producing a pleasant bubbly flow or gentle spray.

4. Water level control devices to replace old ballcocks in toilets: preliminary evidence suggests that the majority of existing toilets are leaking; water level control devices like fluidmaster eliminate this leakage. In the Washington metropolitan area the average apartment house is leaking 25-30% of its water.

Cost for the Fixtures (Including Installation)

$12 per apartment unit (one showerhead, two aerators, set of toilet dams)
$10-12 per apartment for fluid level control (not necessary for each unit)

THIS IS NOT THE OLD BRICK-IN-THE-TOILET PROGRAM: the plumbing fixtures we are talking about are durable, look good, and produce proven savings. Furthermore, no change in personal habits is required. Changes in personal habits to eliminate waste can, of course, significantly add to the savings.

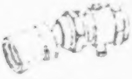
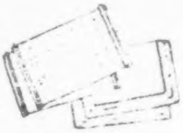
PROGRAM IS A BENEFIT TO THE CONSUMER AND TO THE COMMUNITY: Rather than being a hardship, these plumbing fixtures benefit the consumer by savings on the water bill, the sewer bill, and the hot water heating bill. The community saves because it can accommodate growth without enlarging its water treatment or sewage plant.

For more information contact Brent Blackwelder or Pete Carlson at 202-544-2600.

WATER & MONEY—SAVED BY A FAMILY OF FOUR

RESULTS OF THE LONGSHOWERS' EASY-TO-DO WATER-SAVING PROGRAM:

(gallons used in one day by a family of four)

	TOTAL WATER		HOT WATER	
	before	after	before	after
 SHOWERS (4 showers, 25 minute total)	125	55	62.5	27.5
 TOILET (20 flushes)	110	80	—0—	—0—
FAUCETS	26	16	16	10
WASHING MACHINE (1 load—34 gallons)	34	34	25	8
DISHWASHER (1 load—17 gallons)	17	17	17	17
TOOTH BRUSHING (8 times—not counted in faucet total)	16	2	—0—	—0—
TOTAL GALLONS USED IN ONE DAY	**328**	**204**	**120**	**62**
	before	***after***	***before***	***after***
	TOTAL WATER		**HOT WATER**	

HOT WATER IS EXPENSIVE

SAVINGS IN WATER, ENERGY, MONEY

At average water and energy rates in the Washington, D. C. suburbs (June 1980) the Longshowers saved:

TOTAL WATER SAVED IN ONE YEAR (including the dishwasher)	**47,028 gallons**
MONEY SAVED ON WATER/SEWER BILLS:	
WATER (at 90¢ per 1,000 gallons)	$42.33
SEWER (at $1.10 per 1,000 gallons)	$51.73
TOTAL MONEY SAVED ON WATER/SEWER IN ONE YEAR	**$94.06**
HOT WATER SAVED IN ONE YEAR (including the dishwasher)	**22,938 gallons**
MONEY EARNED IN ONE YEAR BY SAVING HOT WAT	
—with an **electric** water heater (electricity at 6¢ a kilowatt hour)	**$285.52***
—with a **gas** water heater (gas at 38¢ a therm)	**$102.86***
—with an **oil** water heater (oil at $1.00 a gallon)	**$205.06***

Source: "Easy Ways to Save Water Money & Energy at Home" by Edwin F. Wesley, Jr. For copies write Potomac River & Trails Council, 12 S. Market St. Frederick, Md. 21701 or contact the Environmental Policy Institute. Cost: 50¢ each. Cheaper rates for bulk orders.

APPENDIX V

FIGURE 9
Irrigated Acreage in Central Arizona *

Eligible for Federal "Set-Aside" Subsidies	
Cotton	50%
Wheat	13%
Barley	6%
Grain Sorghum	4%
Subtotal	73%
Other Crops	
Hay (including Alfalfa)	16%
All Vegetables	4%
Citrus	3%
Other	4%
Subtotal	27%
TOTAL	100%

SOURCE: *1977 Arizona Agricultural Statistics*, compiled by the Arizona Crop & Livestock Reporting Service, a cooperative function of the U.S. Department of Agriculture and the University of Arizona.

*Maricopa, Pinal and Pima Counties

it has been doing over the years) is the competitive advantage provided by low-priced reclamation water. Data from an analysis of the costs of producing upland cotton in the United States indicate that Southern California and Southwest Arizona are enabled to stay in production at lower cotton prices only because of the low price they pay for reclamation irrigation water — about $3 per acre-foot . . .

If irrigators currently paying approximately $3 per acre-foot for Colorado River water delivered to the Imperial Valley and other districts in Southern California had to pay the average cost of providing new water, their costs of production would be raised substantially, and they would no longer have average returns of $16 per bale. Instead, as shown below, there would be an average loss ranging from $36 to $96 per bale depending on the price of the water and the efficiency with which it is used . . .

The claim that reclamation regions have a cost-efficiency advantage over other areas in producing cotton is not supported by the data. The California-Arizona reclamation-served region has costs uniformly higher than the Mississippi Delta, even under conditions of highly subsidized water . . .

This means that the United States fails to produce its cotton at the lowest cost and in the most efficient manner . . .

The impact of this low-cost reclamation water on increased cotton production has been felt in many areas of the United States. The acreage of cotton harvested on reclamation-served land increased over 3½ times between

APPENDIX VI

SOME PROJECTS HAVE ONLY A FEW BENEFICIARIES

In 4 of the 14 cases we reviewed a high precentage of project benefits went to only a few people or businesses. Estimated project costs ranged from about $7 million to $111 million.

Project name/ purpose	Location	Total Cost	Federal Cost	Number of beneficiaries
		(000 omitted)		
Blue River Channel Flood control	Missouri	111,000	94,100	a/281
Hendry County Flood control	Florida	17,719	13,190	b/ 21
Southern Branch of Elizabeth River Navigation	Virginia	7,634	5,282	2
York and Pamunkey Rivers Navigation	Virginia	50,500	47,200	c/ 3

a/One company will receive 55 percent of total project benefits.

b/Four landowners have control over 61 percent of benefited area.

c/One company will receive 86 percent of total project benefits.

Source: GAO Report CED-81-12 "Congressional Guidance Neede on Federal Cost Share of Water Resource Projects When Benefits Are Not Widespread November 13, 1980

Project	Agency	Type of special benefits	Appendix page no.
Blue River Channel Flood control Kansas City, Missouri	Corps	(a, b, c)	41
Hendry County Flood control Hendry County, Florida	Corps	(a, b, c)	46
Richmond Water Filtration Plant Flood control Richmond, Virginia	Corps	(d)	51
Southern Branch of the Elizabeth River Navigation Chesapeake, Virginia	Corps	(a, b, c)	55
River Rouge Flood control Wayne County, Michigan	Corps	(d)	59
York and Pamunkey Rivers Navigation Southern Virginia	Corps	(a)	61
Bayou Boeuf Irrigation and recreation Alexandria, Louisiana	SCS	(b)	63

Project	Agency	Type of special benefits	Appendix page no.
Bayou Rapides Irrigation and recreation Alexandria, Louisiana	SCS	(b)	66
Pohick Watershed Flood prevention Fairfax County, Virginia	SCS	(b, c)	69
Sarasota West Coast Flood prevention and drainage Sarasota, Florida	SCS	(b)	74
South Sumter Flood prevention and drainage Sumter County, Florida	SCS	(b)	77

Each of the projects listed above are discussed on the following pages of this appendix.

a/Limited beneficiaries.
b/Special localized benefits: land enchancement.
c/Special localized benefits: increase tax revenue.
d/Special localized benefits: other.

APPENDIX VII

[From the Kansas City Star, Sunday, Aug. 17, 1980]

CONTRACTORS SCRAMBLED TO KEEP THE GAME GOING

(By Myron Levin, staff writer)

Bart Tully left the Crown Center Hotel for the offices of the Army Corps of Engineers, sure that a contract was in the bag. Everyone else who was expected to bid had agreed to exceed his price.

But on arriving at the federal building for the bid opening that spring afternoon in 1976, Tully's confidence quickly dissolved. The corps saved money as a result.

As the Memphis, Tenn., construction executive would tell a federal court jury at a criminal trial in New Orleans in May 1979, that firms dominating river improvement work had agreed to let Massman Construction Co., of 3917 Broadway, Kansas City, win one of the contracts being let that day while Tully's firm—Patton-Tully Transportation Co.—would win the other.

Massman would get the job building and repairing rock dikes on the Missouri 50 to 120 miles above the mouth. As it had for much of the last 15 years, Patton-Tully was to get the annual contract to work from the mouth to Mile 50.

Tully told the jury he hadn't bothered to attend the meeting at which the arrangements were made. He had asked his friend Alois Luhr, president of Luhr Brothers Inc., Columbia, Ill., one of the nation's biggest river contractors, to represent him. Later, Luhr told Tully that the other firms agreed to let him have the contract if one of them—Markham and Brown Inc., of Dallas—got part of the work.

Massman submitted the low bid on the first contract, as planned, but Tully feared the signals somehow had been crossed. W.H. Carder Inc., and Souter Construction Co. Inc.—a pair of Arkansas firms—had unexpectedly put in a joint bid. Even though Massman had underbid them, it was unclear what Carder and Souter were up to—for they rarely had appeared in this area to place bids.

"We (Tully and Charles L. "Jack" Rodgers, Markham and Brown president) got together and Mr. Rodgers went to the telephone to see if he could get hold of Mr. Carder to find out if they were bidding the job seriously," Tully recalled.

But Carder couldn't be reached, and with only minutes before the bid opening, Tully panicked, tearing up his bid and preparing a new one that dropped his rock price from $6 ton to $5.83. He won the job with a bid of $1,266,245.

According to Tully and several others who confessed taking part, such snafus occasionally marred an otherwise orderly scheme that largely determined, for more than a decade, how hundreds of millions of dollars in Missouri and Mississippi river jobs were allocated.

Testifying at the trial last year, Tully and the other government witnesses said almost all river contracts let by corps district offices in Kansas City, St. Louis, Omaha, Memphis, Vicksburg, and New Orleans between 1964 and 1976 were the subject of allocation agreements.

While those taking part in the scheme hardly publicized it, neither did they take special pains to keep it secret from the corps, according to the picture that emerged at the trial.

Typically, contract winners were chosen at meetings held the night before in the cities where bids were to be opened.

While the executives often met in a hotel room, frequently their talks continued over dinner in public restaurants, according to testimony.

Some of the executives, however, began worrying that these arrangements were too conspicuous, particularly after a 1973 Memphis meeting that apparently resembled an Elks convention.

John T. Massman, a former Massman Construction Co. vice president who entered a no contest plea, testified that some of those at the meeting complained about the three- and four-man delegations sent by a few firms. The meetings should be limited to a company principal or his representative, Massman recalled some of the executives saying.

"Why is that, sir?" a prosecutor asked in the trial.

"Well, the subject matter wasn't for public consumption, I guess," Massman replied.

A more common concern, testimony revealed, was creating a strong illusion of competition to discourage outside firms from bidding.

This strategy required that firms not tabbed to win contracts submit high bids, rather than not bidding at all. A poor response to bid invitations would invite the attention of outside contractors, said Wallace P. McGeorge, president of Pine Bluff Sand and Gravel Co., Pine Bluff, Ark., who testified under a grant of immunity.

The contractors were even willing to take unwanted corps jobs just to keep all the work in the family.

In 1974, for example, the Memphis district sought bids on "more work than we really wanted to do," Tully testified. But after failing to convince the other firms to take the extra jobs, Patton-Tully and Luhr Brothers bid jointly—and won—because "we didn't want some outside contractor . . . to come in and bid work in the Memphis district," Tully said.

Testimony indicated that most meetings decided the fate of several contracts—perhaps all the jobs a corps district had scheduled for that year. If there weren't enough contracts to satisfy everyone, winners typically agreed to subcontract part of the jobs to losers.

As a result, testimony indicated, the companies usually agreed on a fair division of the work.

But when they didn't agree, their pact threatened to collapse like a house of cards.

Patton-Tully and Markham and Brown, for example, had a minor scare before the 1975 letting of the contract to work on the Missouri between the mouth and mile 50. Patton-Tully was to get the job and share it with the Dallas firm.

But all was not well on the morning of the letting, as Jack Rodgers, Markham and Brown president, found out when he met with Tully at the Crown Center Hotel.

"I told Mr. Rodgers we were having a problem with Southern River Rock Company or Gibbar Brothers (two affiliated Perryville, Mo., firms that have been indicted but not tried)," Tully testified.

"I told Mr. Rodgers, at that time, that I thought that I was just going to have to go and bid the job and let them bid whatever they felt," Tully testified.

But Rodgers suggested that he visit Paul Gibbar in an effort to work something out, Tully said. About an hour later Rodgers called, saying "he was having a problem with Mr. Gibbar because Mr. Gibbar . . . was out of work and he needed some work for his crew."

Tully said he told Gibbar that if he laid off the Missouri River job, Tully would try to get him part of

Luhr's work on the Kaskaskia River in Illinois.

Gibbar "indicated that he might be interested in that proposition," Tully said, so he called Luhr and the arrangement was made.

A series of such deals—each fragile and each dependent on the others—threatened to unravel and throw the busy 1976 contracting season into chaos.

Back in 1974, Kansas City-based Pensacola Construction—Massman Construction's southern states affiliate—had been allocated a Red River, La., bank protection job known as Hadden-Fort DeRussy. But the project was delayed, and when the contract was finally to be let in June 1976, McAlister Construction Co. of Memphis was threatening to break ranks and compete for the job.

Over dinner in a Vicksburg restaurant, John Massman would testify, he protested to a McAlister executive "that I had learned his firm was interested in working on the Red River, and we felt, as far as our firm was concerned, that we have gone along with him and all his requests on the Mississippi River."

McAlister was not trying to make life difficult for Massman, however. The problem was that it needed the upcoming Cottage Bend job on the Mississippi River, but could not be assured of winning it because Patton-Tully also wanted it.

Patton-Tully, in turn, claimed it couldn't lay off Cottage Bend without being assured of winning the upcoming Carruthersville-Lynwood job on the Mississippi.

Here the problem was Luhr Brothers, which would not agree to lay off Carruthersville-Lynwood, according to testimony by Tully.

But Luhr wanted the upcoming Kentucky Point job on the Mississippi, and eventually was brought into line when Tully threatened to compete for that.

So everyone, after the shuffling, emerged with a winning hand: Pensacola had the $7 million Hadden-Fort DeRussy job; McAlister the $1.4 million Cottage Bend contract; Patton-Tully the Carruthersville-Lynwood work, and Luhr the Kentucky Point.

[From the Kansas City Star, Sunday, Aug. 17, 1980]

Names Reappear Despite Bid-Rigging Cases

(By Myron Levin, staff writer)

The Army Corps of Engineers' multimillion dollar river improvement program continues to be dominated by the same big construction firms accused of rigging bids on corps projects for at least 12 years.

A federal grand jury in New Orleans indicted 16 companies and 10 executives Sept. 27, 1978, alleging they rigged bids to divide up hundreds of millions of dollars in river improvement contracts on the Missouri and Mississippi rivers and tributary streams.

In the 23 months since the indictments were handed down:

- Ten of the companies and eight executives—18 of the 26 defendants—have been convicted of criminal charges or have entered guilty or no contest pleas, including two firms here. Some of the convictions are on appeal, while a few of the defendants have yet to stand trial.
- Indicted firms have been awarded more than $175 million in new corps contracts, with at least $45 million in contracts going to the two firms based here.

The Corps of Engineers says it would not be in the government's interest to bar the 16 companies from bidding. Together, the firms do more than 90 percent of the river improvement jobs in the Missouri and Mississippi valleys, so shutting them out would sharply reduce competition, corps officials say.

But some corps officials have gone far beyond letting the firms continue to bid.

While the official corps position is to condemn the scheme, some officials—including a few at high levels—express more sympathy for the position of the contractors than for the Justice Department, which has prosecuted the case.

The corps' reluctance to behave as a wounded party has been evidenced by these incidents:

- At least eight corps officials, including two colonels and a major general, last year wrote U.S. District Judge Adrian Duplantier to urge lenient treatment of a group of executives about to be sentenced. While some letters merely said the defendants had done high quality work, others lauded them as men of outstanding moral character.
- Several corps officials—including top officials here and in St. Louis—continue to claim that contracts let in their districts never came under suspicion. They make this assertion despite uncontroverted trial testimony that for years the contractors secretly allocated virtually all contracts let by the Kansas City, St. Louis, Omaha, Memphis, Vicksburg and New Orleans districts of the corps.
- Though trial testimony indicated that designated winners quoted prices without fear of being underbid, some high-level corps officials expressed doubt that the government was charged more than market prices. One Justice Department source expressed fear that such statements will undermine a companion civil damages suit alleging that overcharges cost the government nearly $12 million in the last four years of the conspiracy alone.

While some of the indicted firms traditionally have had lucrative contracts building locks, dams and levees, the bid-rigging allegations were limited to their work on "bank stabilization" projects.

These involve the construction and repair of rock dikes that direct water to midstream to curb bankline erosion and improve river navigation.

Seven of the indicted firms regularly did bank stabilization work on the Missouri under contracts with the Kansas City and Omaha districts. Since the late 1950s, corps documents reveal, the Missouri River work has been worth about $160 million to these firms, with Massman Construction Co., 3917 Broadway, receiving about $60 million of it.

That firm and its former chief executive, John T. Massman, 45, last year pleaded no contest to criminal charges in connection with the bid-rigging case. They agreed to pay $939,000 in civil and criminal penalties.

Also pleading no contest and agreeing to pay $796,000 were Pensacola Construction Co., also of 3917 Broadway, and its general manager, James B. Cotton. Pensacola—formed by Massman 40 years ago to build the Pensacola Dam, which creates the Grand Lake of the Cherokees in northeastern Oklahoma—is Massman's operating arm in the southern states.

Testimony in the May 1979 trial of three companies and four executives indicated that from at least 1964 to 1976, representatives of the 16 firms routinely met to divide contracts for bank stabilization jobs advertised by the Kansas City, Omaha, St. Louis, Memphis, Vicksburg and New Orleans Army Corps of Engineers districts.

According to the trial transcript, witnesses said the executives usually arrived in town the day before bid openings and decided, often after heated debate, who would get which contracts. A designated winner told the losers what bid price to exceed, agreeing to return the favor by submitting intentionally high bids on other contracts being let the same day or in coming weeks.

With all bids submitted, the firms signed a government form stating that their bids were "arrived at independently, without consultation, communication or agreement" and without prices being "knowingly disclosed . . . to any other bidder."

The defense called no witnesses and did not dispute charges that the meetings took place. But in cross-examination of government witnesses, defense attorneys sought to convince the jury that the goal was not to cheat the government, but to divide the work to smooth the peaks and valleys of a lucrative but risky business.

Citing cases in which designated winners underbid 'surprise' bidders not taking part in the scheme, the defense also claimed there was no proof the government had been overcharged.

Seven companies and four executives had already admitted their role in the scheme by May 24, 1979, when the New Orleans jury convicted three more companies and four individuals.

Two months later, Judge Duplantier placed six of the men on probation for three years and ordered them to pay fines and perform weekly public service work.

In rejecting the government's recommendation of jail terms, Duplantier observed that the men had "a background of credentials which I suppose has hardly been assembled before in a courtroom in a criminal case.'

He said he'd learned of their "lifetime of service and of good reputation" in character reference letters sent by prominent persons—including key corps officials.

The Star learned that at least eight corps officials wrote the judge, and the corps has provided copies of some of the letters.

A.P. Hutchison, construction chief of the Corps of Engineers southwestern division, based in Dallas, told Duplantier he had worked several years for a company partly owned by the father and uncle of defendant W. Kent Ford, president of Ford Construction Co., Dyersburg, Tenn.

"If I had to pick a person to trust my life savings to, I would not hesitate to select Kent Ford. I do not believe he has done anything that violates the principles of the contracting industry," Hutchison wrote.

St. Louis District officials wrote three letters praising defendant Alois Luhr, president of Luhr Brothers, Inc., of Columbia, Ill., which has been heavily involved in bank stabilization work on the Mississippi and on the Missouri above and below Kansas City.

The No. 2 corps official in St. Louis—Col. John S. Wilkes III—called Luhr "the singularly most outstanding contractor" working for his district.

While Wilkes had come to know Luhr in a professional capacity, he also had "had the privilege of meeting Mr. Luhr's family and observing them in a sociable atmosphere," according to the letter.

"In all cases, I have found Mr. Luhr to present the highest degree of uprightness of character and sense of moral principles. He possesses the quality of absolute truthfulness and honesty and is known to be scrupulously accurate, frank and fair in all practices," Wilkes stated.

"This quality of integrity, coupled with his basic display of honesty, radiates confidence among his subordinates and radiates confidence to the government agencies with whom he holds official contracts."

Luhr also came highly recommended by Wilkes' boss, Col. Leon E. McKinney, who was St. Louis district engineer when he wrote the judge on May 29, 1979.

"Mr. Luhr, and his firm, Luhr Bros., Inc., epitomize the personal and professional integrity which I learned is so important when I was a cadet at the United States Military Academy at West Point," wrote McKinney, who recently retired from the corps to take a high-level post with a St. Louis coal mining firm.

McKinney had already incurred the wrath of some Justice Department officials by publicly suggesting, when indictments were returned, that it was almost impossible the corps had been overcharged. In comments to a St. Louis newspaper, McKinney told how the corps estimates the cost of each job and won't let a contract unless the low bid is within 25 percent of that estimate.

The Justice Department had argued that the estimates were based on historical contract prices inflated by years of bid-rigging.

Eight of the companies—including Kansas City-based Massman and Pensacola—have already agreed to pay about $4.7 million to settle a companion civil suit seeking reimbursement for alleged overcharges.

Prosecutors fear their case against the other eight firms could be compromised by remarks like McKinney's, which one Justice Department source said lent credibility "to the very defendants that had, if you'll excuse the expression, screwed them (the Corps) for years."

A former Justice Department said many corps officials couldn't seem to understand that "if you've got a systematic bid-rigging conspiracy going on, year after year, you re going to be paying more than a fair market price."

The corps has decided it would be anti-competitive to bar the contractors from bidding new projects. They could be suspended only for "the protection of the government and not for punishment," which is the province of the courts, says Ed Green, corps public information official.

The Justice Department seems to agree.

"It's not our purpose to eliminate competition," said Mrs. Mary Coleen Sewell, one of those prosecuting the case.

Accordingly, the indicted firms continue to grab a big share of corps work.

Since the indictments were returned four firms—Luhr Bros. Inc., Massman Construction Co., Peter Kiewit Sons' Co. of Omaha, and Midwest Construction Co., Nebraska City, Neb.—have won Missouri River contracts from the Kansas City and Omaha districts.

More than $100 million in new contracts have been awarded by the St. Louis, Memphis, Vicksburg, and New Orleans districts to 12 of the firms, according to corps records.

Meanwhile, some top corps officials apparently remain oblivious of the fact that bid-rigging was going on in their districts.

Uncontroverted trial testimony described bid-rigging meetings and identified specific contracts rigged in six corps districts, including Kansas City and St. Louis.

Yet in recent conversations, Col. Walter Bell, Kansas City district engineer, and his former St. Louis counterpart, retired Col. Leon McKinney, said that the scheme only involved contracts let by the New Orleans District.

Wilkes, the St. Louis deputy district engineer, made a similar statement: "None of the contracts that were under investigation by the Justice Department had anything to do with the St. Louis District," he said. "There was no impropriety found with the contracts we had let."

APPENDIX VIII

DATA ON THE EMPLOYMENT DEMAND AND ENERGY INTENSITY OF VARIOUS FEDERAL PROGRAMS

WATER PROJECTS RATE POORLY

In a time of inflation, energy crisis, and unemployment people fighting destructive water projects should point out to decisionmakers that these projects create fewer jobs and use more energy than almost any other form of federal expenditure. For example, if instead of building Corps' dams and canals, federal money was put into mass transit, waste treatment construction, national health insurance, or social security programs--to name just a few--then large amounts of energy would be saved and many more jobs would be created. Here are the figures:

Federal Program	Energy Consumption (BTU per 1963 dollar of program)
National Health Insurance	40,000
Railroad and Mass Transit Construction	43,100
Water and Waste Treatment Facilities Construction	65,400
Educational Facilities Construction	70,600
Personal Consumption Expenditures (Tax Relief)	86,000
Corps Projects	from 92,000 up to 146,000

SOURCE: "Energy, Manpower, and the Highway Trust Fund", Roger Bezdek and Bruce Hannon, Science, August 23, 1974, vol 185, pp. 669-675.

Federal Program	Employment Demand (resulting from $1.13 billion investment shift from Corps of Engineers construction)
Corps Construction	73,380 jobs
Waste Treatment Construction	95,609 jobs up +30.3%
Mass Transit Construction	78,443 jobs up + 6.9%
Social Security Benefits	95,968 jobs up +30.5%
National Health Insurance	115,419 jobs up +57.3%
Tax Relief	81,192 jobs up +10.6%

SOURCE: "Job Impact of Alternatives to Corps of Engineers Projects", Bruce Hannon and Roger Bezdek, Engineering Issues--Journal of Professional Activities, ASCE, vol 99, October, 1973, pp. 521-531.

Mr. CROW. Thank you, Mr. Berick.

[The statement follows:]

STATEMENT OF DAVID BERICK, WASHINGTON REPRESENTATIVE, ENVIRONMENTAL POLICY CENTER

I am David Berick, Washington representative of the Environmental Policy Center. Thank you for the opportunity of expressing our views on fiscal year 1982 DOE nuclear programs.

In light of the new priorities established by the Reagan administration for nuclear energy programs within the DOE, we would like to call the committee's attention to three specific issues: DOE nuclear waste programs, DOE programs to extend uranium resources and their impact on breeder reactor development, and Federal support for the Allied-General Nuclear Services reprocessing plant at Barnwell, S.C.

Nuclear waste.—We are encouraged by the administration's apparent recognition of the problems associated with finding a way of permanently disposing of nuclear wastes produced from commercial and defense production programs. Public statements of DOE officials indicate DOE will focus its attention on the selection of sites and development of permanent, full-scale, licensed repositories. As stated before this committee over the last 3 years, we believe that this focus on permanent disposal is the proper role for the Federal Government and support the Reagan administration's renunciation of the Carter administration's ill-conceived policy for making the Federal Government responsible for interim management of commercial spent nuclear fuel.

We are especially concerned, however, over the possibility that there will be a repetition of last year's efforts to divert DOE's waste programs away from their present track and toward the construction of quick demonstration projects instead. Echoing our testimony before the House Science and Technology Committee, little would be gained by disrupting DOE's ongoing program. On the one hand, DOE is already conducting programs for the emplacement of radioactive wastes and spent fuel in underground test facilities at the Nevada test site and Hanford, Wash. An additional test facility in a salt formation was approved in the Fiscal Year 1981 Energy and Water Development Appropriations Act. On the other hand, neither the public nor the nuclear industry will find confidence in a demonstration project conducted outside of an orderly, NRC-approved schedule of repository development. Put quite simply, no one will believe or wait for DOE to declare such a demonstration a success. While the details of DOE's newly proposed "testing and evaluation facility," which would be incorporated at a stage in the selection and licensing process for a full-scale repository, are unclear, we believe that such a proposal to be more constructive than the drastic redirection of DOE's entire waste isolation program proposed by the Science and Technology Committee.

Uranium extension technologies and breeder programs.—As the Wall Street Journal pointed out in an editorial on February 13, 1981, uranium prices would have to rise sevenfold before breeder reactors would become commercially feasible. The editorial went on to say that since plutonium as a fuel would not be economical until the year 2030, "There is no need for new subsidies for its development in the midst of a budget emergency." We believe this conclusion is underscored by other major DOE annual budget items for extending uranium resources including $86 million for advanced uranium isotope separation technology, $10 million for uranium resource evaluation, $678 million for construction of the Portsmouth Gas Centrifuge Enrichment Plant, and $76 million for advanced gas centrifuge development and demonstration. Funding is also being requested for continuation of DOE's program to extend burn-up rate of convention lightwater reactor fuel. These programs are believed to be fully capable of effecting a 50-percent increase in uranium utilization. It is counterproductive to ignore the economics of uranium utilization and the large Federal expenditures to extend uranium resources, while at the same time accelerating breeder programs. We believe that significant savings could be achieved by deleting all but the $13 million for operation of the Shippingport reactor and the lightwater breeder reactor program (a cut of $41 million) and by canceling the Clinch River breeder reactor ($254 million in fiscal year 1982 alone).

Subsidy for AGNS Barnwell reprocessing plant.—Representatives of Allied-General

Nuclear Services, the owners of the Barnwell reprocessing plant, are making their annual plea to the Congress for a direct operating subsidy of $11.5 million. To date approximately $54.5 million have been appropriated directly for AGNS in order to keep open the option of commercial operation, and additional Federal funds are received by AGNS through research contract arrangements in order to meet its $18 million annual budget. Reprocessing is not economical, and in testimony this year before the Congress AGNS has claimed that commercial operation is simply not feasible and that the facility must be purchased by the Federal Government. We must agree with the decision made by the Reagan administration earlier this year to defer funding operating expenses to AGNS and urge this committee to follow suit. If commercial operation is not feasible, why pay AGNS millions of dollars to tell you so?

ADDITIONAL PREPARED STATEMENTS

Mr. CROW. Any other comments? If not, there are some additional prepared statements in opposition to various projects that have been submitted for the record that will be included at this point.

[The statements follow:]

LETTER FROM NORMAN AUSTIN, TRIBAL PRESIDENT, FOUNTAIN HILLS, ARIZ.

Senator MARK HATFIELD,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HATFIELD: Please enter the following letter as testimony in the hearing of your Committee on Appropriations Subcommittee on Energy and Water Development. This is the text of a letter which was mailed to you on February 26, 1981, for which we have had no answer:

The Tribal Council of the Fort McDowell Indian Community wishes to express its deep gratitude for the concern and sympathy you have shown toward our community in its effort to prevent construction of the ill-conceived Orme Dam. The new data on alternative to Orme Dam being developed by the Army Corp of Engineers and the Power and Water Resource Service bears witness to the wisdom of your concern. Six dams upstream from the Orme site have been found to be unsafe, and to make them safe would require expenditures of at least $835 million on top of the $545 million cost of Orme Dam. The total cost to the taxpayer would be more than $835 million in 1980 dollars. For less than half this amount, $415 million, both dam safety and identical degree of flood protection can be achieved by replacing Roosevelt Dam and building a new dam on the Verde River at the cliff site. In spite of the clearcut facts, Arizona Senators and most of its Congressmen are continuing to push for Orme Dam. We feel that their motives in this are purely political and have nothing to do with either professional judgment or fiscal responsibility to the American taxpayer. It is our deep hope that you will continue to be a powerful influence for reason and responsibility in your new position as chairman of the Appropriations Committee and the Subcommittee on Energy and Water Development. We would like to meet with you at your convenience during the latter part of March when we will, hopefully, be in Washington to meet with Interior Secretary Watt. We would also appreciate the opportunity to testify before your subcommittee this spring in order to place on the record our feeling and concern regarding Orme Dam.

Thank you very much.

Sincerely yours,

NORMAN AUSTIN, *Tribal President.*

STATEMENT OF PATSY LYLES, LAKEWOOD, N. MEX.

If flood protection is top priority as stated by the Bureau for the vicinity of Carlsbad, then why not consider the alternative of retard dams in the area and/or modification of existing dams, and the floodproofing of existing structures. Environmental defense movies show the folly of counting on upstream dams for protection from floods when storms strike below major reservoirs. Brantley Dam as proposed for Eddy County, N. Mex., would not provide flood protection from Dark Canyon, Hackberry Draw, or Rocky Arroya, which are all located below the proposed reservoir.[1]

In far too many cases, water projects have worked a hardship on local economies, while also damaging the environment, as reported by the Environmental Policy Institute (June 1976, in "Benefit Claims of the Water Development Agencies: The Need for Continuing Reform"). The also question the damages prevented argument which is being used to help justify the Brantley project.

New Mexico leads the Nation in converting prime farmland to other uses, a 10-percent or more figure (published Feb. 2, 1981, in U.S. News & World Report).

The irreversible conversion of agricultural land to other uses could become a significant national problem over the next 20 years according to former Secretary of Agriculture Bob Bergland. Department of Agriculture figures indicate that over 300,000 acres are lost annually as a result of reservoir construction. Furthermore, the builders of dams have not adequately considered the value of cropland destroyed by the project in figuring benefit-cost ratios of a number of projects. I believe this is the case with the Brantley project. It would seriously affect thousands of acres of prime farmlands in the area.[2] It would destroy two communities.

Costs have been clearly underestimated by the bureau in the past for this project.[3] The costs of relocations and rights-of-way are not a realistic calculation in the 1980 status report. A project cost estimate shows $8,167,000 and $28,293,000 for lands and rights and relocations respectively. A total investment cost is a total of $202,977,000. (See attached data sheets.)

The failure to make beneficiaries of flood control pay costs can result in special windfall benefits to certain narrow interests.

Taxpayers would pay for this project, if it fails, would also pick up the tab for the damage.

Do not believe the use of flat water recreation benefits as a project justification should be allowed. The reservoir would cover an area which in its natural state offers significant and varied recreational opportunities. Certainly, not all reservoirs attract large numbers of visitors. This could be the situation with Brantley in its location.

A survey done by the Agriculture Department reveals that 39 percent of reservoirs had a useful life of less than 50 years while only 36 percent had a life expectancy of greater than 100 years. A study estimated the economic loss annually as a result of sedimentation of reservoirs to be about $50 million.[4]

Prior mistakes by the BOR concerning data, damsite selection, in addition to their practice to proceed with construction and ignore warnings from those outside the bureau[5] are reasons for concern over this project. The Brantley project cannot provide more water for downstream irrigation except to take it from other sources either by purchase or condemnation.[6]

The discount rate should be at least 12 percent, or whatever is used for capital in the private business sector.

The builders count as benefits the increased production downstream as a result of curtailment of flooding over the life of the project, but will not follow similar procedures and count the loss of production on upstream farmland over the life of the project.

If, as stated on page III-28 of the supplement, in 100 years, the Brantley reservoir would impound water at a conservation pool elevation as now occupied by Lake McMillan, then I ask the question: Why is there a need to acquire 39,750 acres of land? Of this amount, we are told 8,950 acres would be in fee title.

Because of the fact this project would not provide protection from other major sources of flooding to the vicinity of Carlsbad and the delays in locating suitable damsites, plus the economics factor, could it be possible that for the benefit of all concerned, the best action might be to "forget it completely"?

REFERENCES

1. Letters attached from R. Lamb, geologist, and S. Reynolds, New Mexico State engineer.
2. Refer to the DES (81-6) on page III-30, Land acquisition requirements will be a total of 39,750 acres.

3. Letter of BOR Commissioner confirms errors in budget document (1978).
4. Environmental Policy Institute research published June 1976.
5. Robert Curry, professor of hazard geology (University of Montana) and U.S. Geological Survey geologists predicted the failure of Teton Dam.
6. DES (81-6) filed with EPA (1981) p. III-15, Evaporation losses to be offset by buying water rights/or using those of lands acquired within the project.

Letter From S. E. Reynolds, State Engineer, State of New Mexico

June 13, 1977.

The Hon. Pete V. Domenici,
U.S. Senate,
Washington, D.C.

Dear Senator: Reference is made to your May 25, 1977, letter in which you enclose Mrs. Patsy Lyles' May 6 letter relative to Brantley Dam (copy attached for your convenient reference) and request my review of her comments.

The Corps of Engineers' files, which probably provide the best record of lives lost due to floods with respect to the Pecos River and tributaries, include the following: 20 lives lost, May-September 1941, Dark Canyon; 1 life lost, May 1951, North Spring River; 11 lives lost, October 1954, Rio Hondo and Berrendo Creek; 1 life lost, August 1966, 4-mile Draw; and 1 life lost, August 1966, North 7 Rivers.

Attention is invited to the fact that these incidents did not involve dam failures. The Bureau of Reclamation through its safety of dams program has found McMillan and Avalon Dams unsafe, because of inadequate spillway capacity. The overtopping of an earth fill dam can result in a catastrophic failure resulting in far greater loss of life and property damage than the same flood would cause under natural conditions. There can be no doubt that failure of McMillan Dam could result in extensive loss of life and property at Carlsbad.

The basic purpose of the Brantley Dam and Reservoir project is the protection of life and property in the vicinity of the city of Carlsbad. According to the Bureau of Reclamation's budget justifications, fiscal year 1978, 1 percent of the project cost is allocated to irrigation, 5 percent to fish and wildlife and recreation purposes, 79 percent to safety of structures, 14 percent to flood and sediment control, and 1 percent to other. The Brantley Dam would replace the unsafe McMillan Dam. Average annual flood damages prevented, exclusive of those that would result from dam failure, are estimated at $967,600 (1971 prices). Mrs. Lyles is correct in stating that the proposed dam would not provide protection from flooding on Dark Canyon.

The third paragraph of Mrs. Lyles' letter makes reference to acreage required for the Brantley project and refers to a Bureau of Reclamation budget document which states "Included in the total cost are $4,324,000 for 41,900 acres of rights-of-way for an average cost of $103 per acre. No right-of-way has been acquired to date."

I am advised by the Bureau of Reclamation that the budget document Mrs. Lyles referred to did not have updated information on acreage required for right-of-way. The southwest region has received special permission not to acquire right-of-way to the elevation of the water surface of a maximum flood. The Bureau presented the most up-to-date information at the Corps of Engineers section 404 permit hearing in Carlsbad on February 24, 1977. That information is as follows:

Total right-of-way required for project	26,400
Right-of-way presently controlled	16,000
Right-of-way to be acquired	10,400
Of the 10,400 acres:	
Required for flood easement	6,400
Required in fee	4,000
	10,400

Total estimated cost for right-of-way acquisition is $4,700,000 (1977 prices).

Please let me know if further discussion of this matter would be helpful to you.

Sincerely,

S. E. Reynolds, *State Engineer.*

Mr. BERICK. I just want to make a few brief comments. My statement, as part of the Environmental Policy Center's submission, is very brief. I will be even briefer.

I just want to take this opportunity to bring the committee's attention to three major areas in the Department of Energy's nuclear program. The first is one that this committee has traditionally been very interested in, which is the nuclear waste area.

We are encouraged by the administration's apparent recognition of the seriousness of this problem. This committee is to be commended for its efforts over the years to keep the Department's waste disposal program on track.

One of our major concerns is that, as this committee fully knows, the House last year tried to completely redirect the Department of Energy's waste disposal programs and tried to cause most of the waste isolation program to be redirected toward the development of demonstration repositories.

This committee did resist that this year. I would encourage the committee to look very carefully at the waste program and be ever-vigilant of the efforts to redirect toward rapid demonstration projects for waste.

Second, we would like to bring to the committee's attention the competition between the uranium extension technologies and breeder programs. So we are trying to make the argument to you that we are funding competing technologies when we are funding both breeders and reprocessing technology while at the same time funding uranium extension technologies.

As the Wall Street Journal pointed out, and the previous administration, on Clinch River, they pointed out for years we do not need the breeder for several decades. The Wall Street Journal article I cite in my testimony, the year is 2030.

We commend to the committee that a great deal of money could be saved by deferring instrument breeder reactors while maintaining the base program and while deferring all but the Shippingport reactor demonstration of the lightwater breeder program.

The third area we would like to bring to the committee's attention is the annual operating subsidy request by the Allied-General Nuclear Services Co., which operates the Barnwell reprocessing plant.

Allied-General has come to the Congress repeatedly asking for operating subsidies. To date, they have received something over $54 million on direct appropriations. Additional funds have been channeled to them through the Department of Energy.

This year in the company's testimony the Congress has said the commercial operation was infeasible, and we would simply wish to agree with the decision by the Reagan administration not to include the operating subsidy in the budget and to point out to the committee that if commercial operation is not feasible, why should we continue to pay Allied-General millions of dollars to tell us that?

Thank you.

STATEMENT OF KENNETH PARKER, PRESIDENT, UPPER WEST FORK RIVER WATERSHED ASSOCIATION

My name is Kenneth Parker. I am president of the Upper West Fork River Watershed Association, a 1600 member citizen group made up of citizens across the state of West Virginia who oppose construction of the Stonewall Jackson Lake Project proposed for Lewis County.

This dam project goes back to the 1930's; was authorized in 1966 at an estimated cost of $34 million; and has a current price tag of $215,900,000.

We believe that the Stonewall Jackson dam project is a poor investment, as well as a waste of our precious resources- agricultural land, timber, coal and gas. And we urge you to halt this project now.

In 1977 Governor John D. Rockefeller IV signed a cost-sharing agreement with the Corps of Engineers which made the state's share for recreation development contingent on appropriations from the State Legislature. Current estimates from the Corps of Engineers of the state's liability are:

$11,035,000 at interest for initial development
$13,450,000 for future development
$ 389,000 for annual maintenance
plus 100% cost of additional facilities

In light of this tremendous cost, and the fact that West Virginia does not need another state park, the West Virginia Senate passed a resolution on March 2nd of this year declaring its unwillingness to appropriate funding for the park development. The state Senate further recommended that the cost-sharing agreement signed in 1977 be rescinded, and that the Corps of Engineers drop plans for a state park at the project. A copy of this resolution is attached. (Action in the House of Delegates is pending.) This statement clearly calls into question West Virginia's commitment to the Stonewall Jackson dam project.

The Stonewall Jackson dam project is currently facing three seperate legal challenges. In April of 1980 a lawsuit was filed by the National Wildlife Federation, the National Taxpayers Union, the Upper West Fork River Watershed Association, the Sierra Club and the West Virginia Highlands Conservancy charging that the Corps of Engineers is violating the interest rate provisions of the Water Resources Development Act of 1974; the Federal Water Pollution Control Act Amendments of 1972, by including water quality benefits without certification from the Environmental Protection Agency; and the Rivers and Harbors Appropriation Act of 1899, by changing the scope of the project without Congressional approval. The suit is in the U.S. Federal Court for Northern West Virginia and is in the discovery stage.

A second suit is before the West Virginia Supreme Court and alleges that the State 401 dredge and fill permit, granted to the Corps by the West Virginia Department of Natural Resources after having been granted and withdrawn previously, was granted illegally because of the DNR's failure to hold public hearings as mandated by law. The work involves the first segment of road relocation of U.S. Route 19 which has not been initiated. The suit was filed by two landowners in the area and the Upper West Fork River Watershed Association. A decision is pending.

A third suit, which is in the Federal Court also, was brought by the J.F. Allen Company, a local contracting firm. It seeks to enjoin the award of a construction contract to a minority contracting firm in Pittsburgh, based on the contention that the Small Business Administration's minority contractor requirement should not apply to this project.

Initiation of this road construction is halted pending a decision of the court on this case.

The Stonewall Jackson dam project is controversial and unpopular, and for good reason. This is what the taxpayers would be getting for their money:

1) A 215 million dollar high-rise dam which can only control 12% (twelve percent) of the drainage in the West Fork Basin, leaving even the town of Weston three miles below it still vulnerable to flooding from uncontrolled tributaries below the dam. The larger city of Clarksburg, twenty miles downstream, would have to experience a 500-year flood before the dam could reduce the water level by less than two feet.

2) A 215 million dollar high-rise dam which cannot provide significant flow augmentation downstream. The Corps states in its EIS "The reservoir storage capacity of the Stonewall Jackson Lake is not sufficient to maintain a high minimum flow schedule for the main stem of the Monongahela River." And since West Virginia does not have a water use law, the Corps cannot guarantee this flow at any point in the river..

3) A 215 million dollar high-rise dam which would destroy ten percent of Lewis County's prime agricultural land while creating no new sites for industry to replace the lost agricultural industry. State Agriculture Commissioner Gus Douglass estimates a loss of $2-3 million in agriculturally generated income annually to Lewis County.

4) A 215 million dollar dam project, 15% of the benefits from which would be for a recreation development that the state does not need, cannot afford and would not be funded by the West Virginia Legislature. The "lake" would have an average depth of only sixteen feet, with no swimming allowed (by a ruling of the West Virginia Health Department), while low flow augmentation water would be released during the height of the recreation season. Nearly 75% of the projected park uses can be achieved in a non-reservoir setting. At least 15 flatwater recreation areas already exist in the population districts to be served by Stonewall, and in order to achieve the Corps' projected visitation figures, according to their own Draft Recreation Master Plan, every man, woman and child in Lewis County would have to visit the park 15.066 days a year by the year 2020!

5) A 215 million dollar high-rise dam to provi water storage for a town of 8,000 population, at a cost to Weston o 4,300,000 at interest for construction plus $11,500 for annual maintenance.

At a time of severe cost-cutting by the federal government, it is incredible that the Stonewall Jackson dam project continues to be funded.

The Upper West Fork River Watershed Association was formed in 1974 to promote a Soil Conservation Service small watershed dam project as a less expensive, less land intensive alternative to Stonewall, which while inundating 3470 acres, would take 20,289 acres in all. Some of the sites for watershed lakes are already owned by the government and can be transferred to SCS. Data collected by the Corps, studies and records would already exist. Dam construction for Stonewall is not scheduled to begin until 1984, and only a three-mile stretch of road built over strip mined land has been initiated and completed. Only 30 million of the estimated $215 million has been spent. We submit that now is the time to abandon the boondoggle Stonewall Jackson dam project and allow the local people to solve a local problem with a much more modest investment of state and federal money.

Political support for our point of view is growing. In the past election Lewis County elected a state Senator and House of Delegate member who oppose the big dam. A majority of the West Virginia Legislature opposes state involvement in the project. With the retirement of our incumbent Congressman, we are looking to our new fiscally conservative, agriculturally oriented new Congressman, Cleve Benedict. The West Virginia Agriculture Commissioner Gus Douglass, Secretary of State A. James Manchin, and 4th District Congressman Nick Staton all share our view.

The Stonewall Jackson dam project is a poor investment, indeed. We urge you to study the project and cease funding it now.

STATEMENT OF ROBERT C. HOFFMAN, COORDINATOR, KENTUCKY RIVERS COALITION

Thank you, Mr. Chairman, for giving my organization the opportunity to testify before this subcommittee. My name is Robert C. Hoffman and I am coordinator of the Lexington-based Kentucky Rivers Coalition, a coalition of twenty groups and over 600 individuals from across the state of Kentucky. The organization's stated purpose is to redirect the course of water resource development in Kentucky, and that is why I am here today. My general comments will precede comments on specific projects.

GENERAL COMMENTS

KRC has noticed that the Army Corps of Engineers has made four legislative recommendations to your Committee, among them new legislative language which would make it easier for states with constitutions prohibiting the indebting of future legislatures to sign cost-sharing agreements for recreation, water supply and local protection projects. KRC, in fact, has spent nearly four years in federal court challenging the right of Kentucky's governor to make such commitments. After several years of exhaustive research, testimony before the Public Works and Transportation Committee, interactions with several federal agencies, and other work, I believe that we thoroughly understand the mechanism of Section 221. It is our opinion that Section 221 serves a very valuable function in the federal system of water resources development in that it is the only device on record which guarantees full financial partnership with the pertinent non-federal interests. Moreover, it is not necessary to amend Section 221 since the states with constitutional prohibitions still have other and more democratic mechanisms available to them if they wish to enter into such agreements. In Kentucky, constitutional problems arose when the governor agreed to sign four such agreements after considerable personal lobbying by Corps employees and by two state Members of Congress. This decision-making process by-passed completely the taxpayers of the Commonwealth and their elected representatives, the members of the Kentucky General Assembly.

There were several options available to allow these contracts to be executed in a constitutional manner. Necessary funds could have been appropriated in advance by the Kentucky General Assembly. Revenue bonds with 40-year maturation periods, the state's legal limit, could have been issued, or the approval of such contracts could have been placed before the voters in a referendum process.

. KRC research has indicated that the interest payments alone would have tripled the first cost of these contracts, so up front payment could avoid the payment of significant sums over time. Further, contracts and recreational developments designed to meet state needs and state budgets could have been developed, so avoiding today's constitutional and budgetary woes. Attached to this testimony are letters from two Kentucky state agencies, one which rejects cost-sharing for recreation at the proposed Yatesville Lake, one of the four aforementioned projects, and for Campground Lake, still in the Phase I stage of development. Additionally, recreation for the Taylorsville Lake project has been scaled far back to a level the state still will have trouble affording after KRC's successful litigation. In fact, the General Assembly's Appropriations and Revenue Committee is having extreme trouble finding funds to continue the state's share of payments.

Recent legislative recommendations by the Corps of Engineers and other factions have recommended the gutting of Section 221 to permit water resource developments to continue without guaranteed repayment. Given the budgetary crises in evidence now in so many states, this action would only invite once default after another. In an era of increasing decentralization of the federal government and increasing state-federal partnership, the gutting of Section 221 would invite only the breakdown of this partnership. To preserve the intent of Section 221 would give the states increased control of their own financial and planning destinies. KRC asks the committee to reject the Corps proposal.

RESERVOIRS

Yatesville Lake is again back in the Corps of Engineers' budget. This miserable excuse for a water project has been identified by state agencies, President Carter, environmental and financial analysts, and even President Reagan's Office of Management and Budget as one of the most useless squanderings of public money that this country has ever witnessed. But still construction funds continue to be requested.

The information which my organization has presented to this committee has not changed over the past four years except to grow more credible than ever. Yatesville is the only project which the Office of Management and Budget has targeted for immediate zero funding, and one of only three designated for termination. Clearly, a Corps of Engineers budget which can boast an actual 6% increase in construction funding and only moderate, across-the-board reductions in planning funds has not been a victim of what some analysts term the "meat axe" approach to budget cutting allegedly used by President Reagan. For Yatesville to be the only project so honored with complete and immediate termination, the monstrous waste of this project becomes only too clear.

A brief analysis of project benefits finds that a recurrence of the area's 100-year frequency flood would be reduced by only 2.54 inches by Yatesville Dam at the nearest downstream community. No benefits would accrue for flood damage reductions between the dam and that community due to the paucity of development along the streams. The attached letter from the Kentucky Department for Natural Resources and Environmental Protection basically supports our contentions.

A letter from the Corps to KRC dated March 10, 1981, states that under the remaining benefits-remaining costs formula, "the recreation, fish and wildlife project purpose (of Yatesville Lake) would now have a negative benefit". The Kentucky Department of Parks has informed the Corps that the Department cannot support the development of recreation facilities for the Project. The letter is attached.

Water quality benefits are also doubtful. The Corps' own 1978 Metropolitan Huntington study, in considering the area's water quality, states that private industry is adequately treating its own waste and that cities are building tertiary treatment plants. The study does not anticipate water quality problems anytime in the near future, yet this is the direct beneficiary of Yatesville Lake's pollution dilution benefits. The Kentucky DNR letter referred to above also notes the "Corps' presentation of anticipated water quality benefits are tenuous".

Finally, Yatesville Lake has not reached the theoretical point of no return. Approximately $13 million of the ultimate $93.8 million needed to complete the federal investment in this project have been expended. Thus, over $80 million still remains to be spent. Only 1% of construction has been completed, a 0.5 mile section of gravel road. Some 70 families and 8,000 acres of land still remain to be bought out. At least one half of the $11 million already spent (not counting the $2 million FY 1981 allotment) could be recovered by selling the 13,096 of already-acquired land back to the public at half of the 1979 average value of Kentucky farmland. Overall, Yatesville Lake is only 12% complete. Given the economically useless nature of this project, it certainly is not too late to withdraw from this project and to invest the funds in other more useful projects.

A $460,000 budget request has been listed for the proposed Campground Lake project. Studies for this project continue to turn up less and less benefits for it, so this is another opportunity for the federal government to save money.

The Department of Parks has informed the Corps that the need for recreational development at Campground is not foreseen. It further stated that unless the need for water supply storage is determined for the project by Kentucky's Department for Natural Resources, it recommended that the project be either placed on the inactive list or deauthorized. A more recent letter from KY DNR reported that no need existed for substantial water supply storage or for a minimal storage capacity of 10mgd for irrigation purposes in the foreseeable future. Furthermore, Corps flood control studies reduced by 50% the amount of storage needed for flood control purposes due to the paucity of downstream floodprone development.

The important aspect about this project are that viable alternatives for each of the benefit categories exist. Three local and state-constructed reservoirs exist for regional water supply needs, and the soon-to-be-completed Taylorsville Lake project is less than ten miles to the north. A clearing and snagging project could be implemented downstream in conjunction with the floodplain management requirements of the National Flood Insurance Program. Also, Green River Lake, Taylorsville Lake, Rough River Lake, and Kentucky Power's Herrington Lake lie less than 50 miles from the damsite. Lincoln Homestead State Park and a long section of the Ohio River navigation pools lie less than 50 miles from the project area. Considerable recreation alternatives already exist.

KRC recommends that the project be placed on the inactive list.

OHIO RIVER BANK EROSION

Erosion problems along the Ohio River grow worse with each passing year. The damage to public and private facilities is mounting into the hundreds of millions of dollars already, and there is no end in sight. Highways, parks, wastewater treatment plants, waterworks, bridges and urban waterfronts are among the public facilities under siege. Every type of private development, ranging from industrial sites to farmland and homes, are also being damaged or destroyed. Two Corps programs exist for addressing this damage. One is the Section 14 authority for emergency bank protection for public and non-profit facilities. The budgeted level for this program for FY 1982 is $4 million. Since a maximum of $250,000 can be spent on individual projects, few public sites are able to be repaired. Since inflation has run rampant from 1974, the year this level was set, to the present, a doubling of the per project level to $500,000 and the total budget to $8,000,000, a rather modest level, can and should be justified.

One of the weaknesses of the Section 32 National Streambank Erosion Control Evaluation and Demonstration Act of 1974 is that only two of the nearly 20 projects located in the Ohio valley lie downstream of Henderson County. The problem is that local community leaders and local landowners have no opportunity to judge how effective these low-cost demonstration projects are, and therefore, it is impossible for them to decide whether investment on their part in similar projects is warranted. This direction leads only to further erosion damage or further dependence on federal water projects.

KRC recommends that the budget request for Section 32,$1.2 million for FY 1982, be increased in order to construct at least four demonstration projects downstream from Cincinnati on both sides of the river. In these areas, projects to reduce damage to agricultural lands would be the most useful since less development occurs along the riverbank in this reach of the river.

INVESTIGATIONS

KRC is largely supportive of the Kentucky River and Tributaries investigation, particularly as it seeks to identify local protection projects for the city of Frankfort and as it identifies water supply alternatives for Central Kentucky. We agree with the Corps that the prospect for dramatically increasing waterway use for commercial bulk commodity transport is very remote, so we propose that funds for this aspect of the study be suspended.

The last budgetary request on which I wish to comment is the Upper Cumberland River Basin Flood Control Investigation. Our members in that area complain that the Nashville District is not actively considering non-structural flood damage reduction measures that may be implemented on a federal or non-federal basis. In a damage-prone area such as this, all alternatives should be considered. Please direct the Corps to do this. Thank you for the opportunity to make known the views of my organization.

Letter From Lou Karibo, Commissioner, Kentucky Department of Parks

November
24
1 9 8 0

C. E. Eastburn
Colonel, Corps of Engineers
District Engineer
Department of the Army
Louisville District Corps of Engineers
P. O. Box 59
Louisville, Kentucky 40201

Dear Colonel Eastburn:

In response to your letter of November 12, the Department of Parks does not foresee the need for recreational development in association with Campground Lake. We already are planning such development at Taylorsville, which is in the immediate vicinity, and we continue to have very serious difficulties with the provisions of the Federal Water Project Recreation Act (P.L. 89-72). Under the terms of P.L. 89-72, we have very little control over what is built or its cost, and following Judge Allen's ruling, we cannot finance P.L. 89-72 projects over a long term without violating both the Kentucky Constitution and 42 U.S.C. Sec. 1962 (d)-5b. Finally, the Commonwealth's difficult financial position makes it impossible to proceed at this time with a project having the magnitude of the proposed Campground Lake development.

Unless the Department for Natural Resources and Environmental Protection determines that the need for water supply storage is enough for the project to proceed, we would recommend that it either remain on your inactive list or be deauthorized.

We appreciate the continued cooperation and assistance of your staff and recognize the Corps of Engineers' contribution to the State.

Sincerely,

Lou Karibo, Commissioner
Department of Parks

Letter From Richard E. Norton, Deputy Commissioner, Kentucky Department of Parks

February
10
1 9 8 1

James H. Higman, Colonel
District Engineer
Department of the Army
Huntington District Corps of Engineers
P. O. Box 2127
Huntington, West Virginia 25721

Dear Colonel Higman:

In response to the January 12 meeting between Department of Parks and Corps of Engineers staff, we have reevaluated the Yatesville Dam Project. On the advice of counsel, we cannot make a commitment for the State to the Yatesville project without being in probable violation of Sections 49 and 50 of the Kentucky Constitution. The existing Public Law 89-72 contract between the State and the Corps for Yatesville, in this view, is invalid and unenforceable. In addition, under the terms of KRS 56.874 which took effect on July 1, 1980, the State cannot enter into a new contract for Yatesville without the approval of the Kentucky General Assembly.

We regret to have to inform you of this matter at this time. However, we believe we would be less than responsible if we did not express our concern before the Huntington District resumes its design and construction efforts.

Please call if you have any questions or if we can be of any further assistance.

Sincerely,

Richard E. Norton, Deputy Commissioner
Planning, Construction and Maintenance

LETTER FROM JACKIE SWIGART, SECRETARY, KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

February 24, 1981

Mr. Tim Murphy
Kentucky Rivers Coalition
P.O. Box 1306
Lexington, Kentucky 40501

RE: Proposed Yatesville Reservoir

Dear ~~Mr. Murphy~~ Tim:

Since many of the aspects surrounding the Yatesville Lake Project relate directly to the Department for Natural Resources and Environmental Protection, Jim King has asked me to respond to your letter of February 5, 1981. While I cannot speak for the other state agencies involved in the project, it is still the Department for Natural Resources and Environmental Protection's opinion that the Commonwealth withold support for the reservoir until the appropriate benefits and costs are carefully reexamined in light of the current economic and environmental situation. The Department basically agrees with your contention that the project has marginal flood control benefits. In addition the Department feels that the Corps' presentation of anticipated water quality benefits are tenuous.

For your information, Richard E. Norton, Deputy Commissioner of the Department of Parks, recently communicated to the Huntington District Corps of Engineers that his Department had reevaluated the Yatesville Dam Project and decided they could not make a commitment for the State to the project without being in probable violation of Sections 49 and 50 of the Kentucky Constitution.

Mr. Norton also expressed the view that the existing Public Law 89-72 contract between the State and the Corps for Yatesville is invalid and unenforceable. In addition, Mr. Norton said that under the terms of KRS 56.874 which took effect on July 1, 1980, the state cannot enter into a new contract for the Yatesville Reservoir without the approval of the Kentucky General Assembly.

Thank you for continuing to provide us with your perspective on this project.

Sincerely,

Jackie Swigart

Jackie Swigart
Secretary

LETTER FROM JACKIE SWIGART, SECRETARY, KENTUCKY DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

December 23, 1980

Colonel C. E. Eastburn
District Engineer, Louisville
U. S. Army Corps of Engineers
P. O. Box 59
Louisville, Kentucky 40201

Reference: Camp Ground Lake

Dear Colonel Eastburn:

This letter is in response to your request of November 12, 1980, for clarification of the Commonwealth's position with regard to the need for water supply storage space in Camp Ground Lake and the willingness of the Commonwealth to assume the costs of same.

It is our understanding that the Corps is still in the process of finalizing the Phase I General Design Memorandum and the Stage I reconnaissance report for Camp Ground Lake. Prior to formulating a final Commonwealth position with regard to water supply needs and cost assumption for this project, the Department would prefer to first review this information, when available, and establish a position on the basis of the latest available data and with regard to all relevant issues.

Based on our current information concerning this project, we have determined that a substantial amount of water supply is not currently in demand in the vicinity of the proposed reservoir, nor is there a likelihood of a 10.0 mgd areal demand in the foreseeable future. Recent improvements in the raw water systems of Bardstown and Lebanon, the presence of Willisburg Lake, the proximity of the Taylorsville project, and the current financial situation of the Commonwealth appear to preclude participation in the water supply storage aspects of the proposed project, based on currently available information. The Department of Parks' recent declination of participation in the recreation aspects further reduces Camp Ground Lake's ability to serve as a "multi-purpose" project.

Thus, based on current information, we would not anticipate Commonwealth participation in the water supply aspects of the Camp Ground Lake project. However, pending receipt and review of the Phase I General Design Memorandum and the Stage I reconnaissance report, the Department will delay making a final determination.

Thank you for the opportunity to respond to this subject. We look forward to continued communication and coordination with you and your office.

Sincerely,

Jackie Swigart
Secretary

BRANTLEY PROJECT, NEW MEXICO—OPPOSITION

APRIL 1, 1981.

SENATOR HATFIELD: The enclosed information is being sent for admission to the hearing record for citizen input concerning opposition to the proposed Brantley project in Eddy County, N. Mex.

Thank you.

MRS. C. LYLES,
Lakewood, N. Mex.

[From the Artesia (N. Mex.) Daily Press, Thursday, Mar. 26, 1981]

RESIDENTS CRITICAL OF BRANTLEY PROJECT

(By Beth Morgan, Daily Press staff)

Residents in the area to be affected by the construction of the proposed Brantley Dam south of here on the Pecos River voiced opposition to the project at a public hearing on the supplement to the final environmental impact statement in Artesia Wednesday.

The meeting, held in the classroom building at Artesia Christian College, was attended by 33 people. It's purpose was to gather citizens' comments on the dam project for inclusion in the final environmental impact statement.

One speaker argued that with so much water being held in a pool, where it is subject to evaporation, a higher percentage of the precious commodity will be lost than if it were left in underground aquifers.

Another area resident, Lola David of Seven Rivers, said she opposes the project for three reasons: (1) it will do away with valuable ranch and farm lands, (2) she questions the safety of the dam site, and (3) it will destroy her home and community.

She continued that the environmental impact statement says 18 families will have to move because of the project, but she estimated the number to be much greater.

Farmers living in the area generally employ other families, and she suggested as many as 70 families may well be forced to move because of the construction of the dam.

Agricultural lands are endangered there by the growth of Carlsbad from the south, which over the past three years has extended its boundaries two and a half miles up the Pecos River, she claimed.

The dam site is approximately five and a half miles south of Lake McMillan and 15 miles upstream from Carlsbad.

The site has been moved 2,100 feet downstream since the final environmental impact statement came out in 1972, when the then proposed site was found unsuitable.

Bill Langenegger, representing the Pecos River Pumpers Association, said he is concerned the members' rights could be impaired, though they don't oppose the dam "per se."

"But we have a lot of fear," he continued. The storage of water will decrease the amount of water available to the group. With base flow in the Pecos, he said the quality of water they pump will be greatly lowered, and at times, it may be nonexistent, he said.

He said it is a painful position to be in, not knowing whether there will be enough water to irrigate spring crops. If the Hagerman and Dexter area farmers he represents, who pump water out of the Pecos, had some say in the timing of releases of water from the dam, they would rest easier, he feels.

He stressed his organization was willing to work with the appropriate persons to insure their interests will be protected. He warned that without such consideration, the group must oppose the dam "because it's a matter of economic life or death * * * we're going to fight like hell if we don't get what we think we have to have."

Howard Howell, a resident in the area of the proposed dam for 35 years, said he and other family members with farms in the area will lose everything they've worked for if the dam goes through. He said they had cooperated with researchers gathering data for the project and in return had received little information. He said they have been lied to, "and even threatened."

"* * * I swear I will not give up without a fight," he declared.

A Lakewood woman, Patsy Lyles, reported that according to a geological engineer of her acquaintance, there is no guarantee a safe dam can be built on the proposed site. She noted an oil company drill rig had almost been lost in the immediate area due to "washout."

Mrs. Lyles continued that the site was turned down for the construction of a dam by the Army Corps of Engineers as early as 1906.

She questioned whether a dam at the site would hold water, because of gypsum deposits in the area, and noted she has become "very concerned about the integrity of the bureaucratic process."

LETTER FROM N. RAYMOND LAMB, ARTESIA, N. MEX.

JANUARY 30, 1980.

Hon. ABRAHAM KAZEN,
U.S. Representative, Washington, D.C.

DEAR CONGRESSMAN KAZEN: I am N. Raymond Lamb, geological engineer, SE New Mexico for 44 years. I have a thorough understanding of surface and subsurface rocks in the area. This includes 7 Rivers formation which outcrops an area of Pecos River at Brantley Dam site.

Brantley Dam is now proposed to rest on the porous and permeable rock of 7 Rivers.

Based on my knowledge of the dam site and on the information of Bureau of Reclamation personnel, there is no absolute proof that a safe dam, 4½ miles of dirt fill with cement gates 90 feet high, can be built.

The Army Engineers have not approved the dam site or that the encatchment will hold water.

The Bureau tends to ignore the fact that Moranco Drilling Co. nearly lost an oil drilling rig by washout of the soil above Seven Rivers formation.

The Bureau of Reclamation has not made a final presentation to the Army Engineers for consideration.

The U.S. Supreme Court is hearing a case filed by the State of Texas on the distribution of water from the upper Pecos River. If Texas wins the case, New Mexico will have no water to fill the dam at Brantley.

I have flown over the flood areas of Carlsbad with Senator Schmitt, the Army engineers, and Bureau of Reclamation people. All agreed that flood danger for Carlsbad was from Hackberry Draw, Dark Canyon, and Rocky Arroyo. These water sources all enter the Pecos River below the present proposed Brantley Dam site.

Over the years I have been involved in the Brantley Dam project, no one has been able to cite me an incident of flood damage from the Pecos River, Hackberry, Dark Canyon area; Rocky Arroyo, yes.

The biggest flood in Carlsbad on the Pecos River was in 1941, and I was there, reported only minor damage at the recreation lake area.

Now a proposed dam at the approximate site of Brantley was turned down by Army engineers as early as 1906.

Until all of the factual data has been processed and approved beyond a reasonable doubt, why would your committee approve a dam at the Brantley site? We have enough unsafe and unsound dams in the United States now.

I beg you to wait for the approval of the data and the actual need before rushing to a hasty political decision.

Respectfully submitted.

N. RAYMOND LAMB.

Attachments.

EXCERPTS FROM LETTER OF R. KEITH HIGGINSON, COMMISSIONER, BUREAU OF RECLAMATION

the top of the conservation pool will be about elevation 3,257 while after 100 years of sediment accumulation this pool will shift upward to about elevation 3,270. The top of the flood control pool after 100 years would be about elevation 3,285. Studies indicate that the water surface elevation would rise to elevation 3,276 about once in 50 years.

In the event of the maximum probable flood, and providing adequate capacity in Brantley Reservoir to assure that Avalon Dam will not fail, the maximum water surface elevation would be about 3,302.

The Bureau of Reclamation intends to buy in fee title these lands below elevation 3,276 and only purchase easements above that elevation. We believe this is a reasonable acquisition policy. If most of a farm unit would be taken below 3,276, leaving only a small inefficient area above that elevation, the Bureau will acquire the whole property. The actual acquisition is usually negotiated between the Bureau and the individual landowner. Therefore, it is impossible to set a definite elevation above which no land acquisition will be made. There will be considerable variance from the elevation 3,276 due to blocking and the problem of economical farm units.

Because of the above considerations, the Regional Director of the Southwest Region requested that lands below elevation 3,276 be purchased in fee title and flood easements be acquired between this elevation and about elevation 3,285. This request was approved by the Commissioner's office (Bureau of Reclamation).

Cost estimates for the purchase of right-of-way for the dam and reservoir have been updated and are considered to be adequate to cover these acquisitions. The acreage and the average cost per acre cited on page 402 of the fiscal year 1978 appropriation hearings are in error. The legislative estimates that were cited are not what landowners will be paid. During the acquisition process, an appraisal will be prepared to determine the full current fair market value of the property to be acquired. Landowners will have an opportunity to negotiate to resolve differences of opinion.

The interest rate used at the time of project authorization was 5-3/8 percent for project formulation and 4.371 percent for repayment. The current interest rates are 6-3/8 and 5.683 percent respectively.

If we can be of further assistance, please let us know.

Sincerely yours,

Clifford I. Barrett
for
R. Keith Higginson
Commissioner

Project Cost Data

Total project construction cost

The total estimated construction cost for the recommended plan, Brantley Project, is $172,728,000 based on January 1979 prices. Table 2 provides a breakdown of costs for the proposed features and compares these costs to those contained in the original authorized plan. The Project Cost Estimate (formerly DC-1) following table 2 provides additional cost data.

Annual operation, maintenance, replacement, and energy cost (OMR&E)

The Bureau of Reclamation will operate and maintain Brantley dam and reservoir. The annual OMR&E cost was reevaluated based on the recommended plan and is estimated to be $208,000 at January 1979 prices. Table 3 provides a summary of the annual costs.

Construction schedule

The construction schedule provides for completion of all project works in 6 years. The amounts shown on line 20 of the following control schedule (PF-2) show the estimated expenditures over the 6-year period.

Economic and Financial Analyses

The Brantley Project, as authorized by Public Law 92-514 II, has been revised as of January 1979. The revision was made to include various modifications of project features and to include fish and wildlife mitigation. A comparison of the various construction features and their costs is presented in table 2. The exhibits referred to in the following discussions are appended to the back of the report.

Costs

Based on January 1979 prices, the total project cost was estimated to be $172,728,000. The interest during construction (IDC) was calculated to be $30,249,000 at 6.875 percent (exhibit A) and was based on the previously shown PF-2. Total investment for the revised plan would be $202,977,000. Based on a 100-year period of analysis at the interest rate of 6.875 percent, the annual investment would be $13,973,000. Annual operation, maintenance, and replacement costs were estimated to total $208,000. This gives a total annual cost of $14,181,000.

Benefits

Under the recommended plan, benefits would be derived from dam safety, irrigation, fish and wildlife, recreation, and flood control.

The primary purpose of the Brantley Project is for safety of dams. Presently, the existing two dams (McMillan and Avalon) are deemed unsafe because of inadequate spillway capacity and considered to be a hazard. The required modifications for the improvement of these facilities to make them safe were estimated by the Bureau of Reclamation to cost about $138,070,000 (January 1979 prices) with interest during construction (6.875 percent) of about $24,652,000 (exhibit B). Total investment would then be $162,722,000 (table 4).

Table 2
Project Construction Costs

	Recommended Plan January 1979 Cost	Plan as Authorized by Public Law 92-514 Title II - indexed to January 1979 Cost
Brantley Dam and Reservoir		
Dam structure (earth embankment)	$ 59,996,000	$25,493,000
Concrete center section (spillway & outlet works)	36,435,000	22,045,000
Small contracts	4,240,000	0
Railroad relocation	22,797,000	10,373,000
U.S. Highway 285 relocation	3,903,000	400,000
County road relocation	344,000	145,000
Power and telephone line relocations	494,000	16,000
Cemetery relocation	100,000	91,000
Protection of oil and gas facilities	655,000	322,000
Rights-of-way	8,167,000 ?	12,217,000
Reservoir clearing	113,000	61,000
Structures and improvements	608,000	128,000
Archeology	615,000	0
General Property		
Permanent operating facilities	307,000	77,000
O&M housing	11,000	121,000
Recreation facilities	2,027,000	4,585,000
Fish and wildlife mitigation (waterfowl)	3,468,000	35,000
Fish and wildlife mitigation (fishery)	3,974,000	
Other Cost	24,474,000	13,255,000
Total construction cost	$172,728,000	$89,364,000 1/

1/ In addition to this cost, some $3,974,000 is estimated to be required to cover the cost of items of general legislation (i.e. Environmental Protection Laws) which has been enacted since the passage of Public Law 92-514 and which must be provided for in construction of the project.

STATEMENT OF LOLA B. DAVID, SEVEN RIVERS, N. MEX.

PART I

I am Lola David, my husband and I own and live on a farm near Seven Rivers. My husband is a retired school teacher. I am in school transportation for the Carlsbad Public Schools. We are both very familiar with the agricultural community, as well as, the city communities, from Malaga north to Roswell, along the Pecos river. We also own property near the river in Carlsbad. In fact, it houses our most priceless grandchildren and children. So therefore, we could only want the most and best protection for them too.

Since I have for the first time last evening, seen this draft; I have been unable to give you exact figures in the context of this statement, but, I reserve the right to forward to you, better substantiated figures by mail. The figures through out will be minimal hot maximum.

For the record, I would like to state here that I have made my opposition to the building of this dam known at prior hearings and meetings and to my congressman. My reasons for the opposition is two-fold - first, the loss of all the farm and ranch land to the country: second, the safety of such a proposed dam. In all honesty, first should be the loss of my home and community.

At this point I would like to point out to you that I don't think we have really taken in the impact of such a project on our community, nor, have we updated it to NOW .

This draft says "18" families now will be involved in relocation. Each farmer and rancher in this area employes at least one, and most, at least three families permanently, with transitional workers, with the exception of the Moutreys operation, which employs many. I can count at least 20 families without even trying. These people will be involved in relocation. These are agricultural worlkers, as well as, office and business employees. Now at least we are speaking of about 70 damilies plus.

Now let's go down stream to C.I.D. Since the figures quoted in the draft seem to be from Agricultural Census of at least five or six years ago, they are outdated. Many changes have taken place in this area. In a five mile radius of Carlsbad, hundreds of acres have been taken out of production to subdivide and for oil exploration. The city of Carlsbad, itself has taken many acres for industry and homesites. These properties are all involved in C.I.D. waters. People are rapidly replacing the farms in this area, including Malaga to the north along the Pecos river some 2.5 miles of new City limits to Carlsbad. Even out of the City limits North and west for about another 3 miles.

I feel that less expensive and destuctive measures could be taken to alleviate the flood and water storage problems of Carlsbad and the C.I.D. Leaving the musch needed ranch and farm lands in use. There will also be many more acres lost to the area, as many of the ranching operations are also dependant on the farms to supplement feed and cash money crops. So the whole farm and ranch operatioms are in jeopardy.

I would hope that a harfer look would be taken into the status of a dam foundation, and actually what will happen when the dam has been built? What will the actual loss of acreage be to farming , ranching, including the huge feed lot, which would have to go, because of a threat of pollution to lake waters?

Also, new projections as to the lands affected in the C.I.D. with regard to irrigation included because of the subdivifing and oil and gas exploration.

Also, the effects of a new determination on water control down the Pecos from Lake Sumner, on the many successful farmers who pump water fromthe river above the dam site. There hasn't been ., to my knowledge, a very satisfactory answer to that problem. If anyone here would care to enlighten me in this area I would appreciate it.

Thank you for listening, and I intend to forward to you a written copy of this statement with closer figure verifications. In addition, for the record, find attached a supplement to this statement titled"PART II". , to be entered along with this foregoing statement.in your record taken at the meeting.

Thank you,

Lola B. David

PART II

I am including a letter written by Mr. Gil Moutrey, to Col. Leonard, March 4, 1977, Re: brantley Dam. It is self explanatory, verifying a great loss yearly to our economy. Such facts as these , and I cannot see why, have been completely ignored in figuring your cost feasibility. You have computed gains from the lower Pecos farms and businesses, but, nowhere do I find the losses from the Branley Project area lands and businesses. I dare say, these outweigh the "potential" losses below the dam in the projected hundred year flood. These losses above the dam are a certainty, if the dam is built. I do not feel this loss can be marked off without mention on page 33. table 6 of the Brantly dam project, New Mexico, Status Report, January , 1980. This shows only benefits downstream. No yearly losses from the aquisitioned land. These lands are not regained by relocation, as there "isn't any more land", whereever the people go to, they will only be replacing someone else. This then is a permanent loss agriculturally as wellas, businesses, mineral exploration an d esthetics. Not to say the least, but probably a life or two It is very hard for the very old to be transplanted, all because someon said"we might have a flood in a few years".

On August 16, 1977,(re: 730-500), Mr Robert H. Weimer, Regional Director, B.O.R. advised by letter that it was true " that Brantley Dam would not provide flood protection_ from flood waters originating below the dam. Since Rocky Arroya and Dark Canyon are two major concerns in this area, I would like to touch on the fact thatextensive work has been done in these areas, in the way of earthen dams implaced by the Soil Conservation people. This has practically eliminated the water rushing down on Carlsbad.. In view of this I feel there is a better way to alleviate this problem, and save all these farm acres, too. I am attaching several pieces of material to maybe give you more insight in this Project. I hope that you will also be able to see that this dam is also unecoessary., and a certain few are pushing for it for their own selfish reasons. In fact they have said"flood " so many times in Carlsbad, that we cannot get a sprinkle now without panic stting in. What used to be a bad drainage system in Carlsbad now is "flood"!!!!! Admiledly, the Corps of Engineers, and Water Resources have on several occasions stated that McMillan and Avalon could be repaired for mush less expense and several alternatives for flood control be put in action in Carlsbad.

The"two oil wells" involved were only the beginning of oil exploration in this area when Brantley was authorized, so that was the end of that. Water Resources has within its reports from hearings held here, a report from Robert Lamb,Geologist Mr. Rufus Carter, Engineer, from Albuquerque, thatthe building of any dam within this area was sheer folly, and a "chancy" thing to try. These reports were made at a hearing held Feb. 24, 1977, Carlsbad, Library Annex. Local Geologist it seems do not get the ear of anyone bent on building the dam. Robert Cubry, of the University of Montana, among several others warned the Corps and the B.O.R. about the building of Teton, well they built it anyway, along with several other dams that have failed.

It has been stated at every potential location for Brantley that they "now have a safe location" only to move the site again and again. The present site is "considered not good", but "suitable". The new or present site will have to be grouted, probably extensively. Mr. Peter Aberle, U.S. Bureau of Reclamation, Idaho Falls, says that "grouting is an art, and done by the best it is never a certainty". It seems that the success of this dam will hinge on the grouting.

The losses and all of the half answered or unanswered questions leaves this project in a very doubtful position.

If then McMillan is so unsafe, why does a large Company want to implant millions of dollars in a Hydro-Electric plant on that dam, and has already gotton the permit for same, on this dam that is to be breached???????,

Lola B. David
Rt. 1, Box 54
Carlsbad, N.M. 88220

Route 1, Box 54
Carlsbad, New Mexico
September 20, 1979

Gary R. Catron,
Director of Congressional
and Legislative Affairs
Department of Interior
Washington, D.C.

Re.; Brantley Dam Project, Carlsbad, New Mex.

Dear Sir:

I am writing to you knowing that the Department of Interior will soon be asked to reauthorize monies for the construction of this dam. To build this dam several thousand acres of prime farm and ranch land, plus one of the largest beef feed lots in the country will be taken out of use.

The U.S. Corps of Engineers has just completed a ten year study, Pecos River and Tributaries at Carlsbad, New Mexico, Feasibility Report for Water Resources Development., as of March 1977. We have been bounced around now for seven (7) years, even with this report in the mill, so I am enclosing for your viewing the District Engineers summary and findings recommendations from this study. The corps is still standing behind its findings and a decision made in 1938, that there was no foundation for a dam closer to Carlsbad than 250 miles north, at Fort Sumner. Thus Carlsbads irrigation reservoir is located there. So now the Bureau of Reclamation is saying they can find a location here. "Bull Corn", They have told us"they just had the location-" only tomorrow they moved again. They are wearing out the banks of the river.

We were also told there weren't any alternatives (B.O.R.) to this dam. Yet, when they met recently with the Fish and Wildlife people, and things got " a little hot", it was admitted that McMillan Lake could be repaired for about 1,300,000 dollars, that is considerably less than the new projection of about 200,million for a new dam that they cannot be certain will even hold water.

When there are alternatives to take care of any flood waters, as recommended by Col.Leonards, office, it certainly seems wasteful of the taxpayers money for the profits of a very few.

The only flood water that I have seen in 25 years that I have lived here was in 1966 and there is some argument about the proper gates not being opened in time to let the excess waters down. They were warned down river at Carlsbad that the water was coming down the river, nothing was done...

Since that time the City deemed it necessary to build another small dam below the mouth of the Dark Canyon , which will help back up some more water in the event we get any water at all down the canyon: "whew", [illegible]

The land that is in project basin is also in one of the richest oil and gas fields in this country.

So, I am asking you to please give careful thought and study to this proposed project, and find that you cannot recommend reauthorization for tBrantley Dam.

Thanking you for your consideration,

I remain ,

Sincerely yours and for,

Lola B David

Lola B. David (Mrs. George,)

Sec. Brantley Dam Area Raidents Assoc.

STATEMENT OF H. GIL MOUTRAY, SEVEN RIVERS CATTLE & FARM CO., INC., N. MEX.

For the record, I want it known that I fully support a preventive measure against the harsh affects the 100 year flood plane could have against the City of Carlsbad. The zoning law which is proposed because of the 100 year flood plane will have a detrimental impact upon our community.

But, is the Brantley Dam the sole answer to this problem? Couldn't we find a beter means of protecting the City of Carlsbad without wasting millions of tax dollars? Because of reasons I intend to go into, I want to go on record that I oppose Brantley Dam to be constructed at the proposed location in the Seven Rivers area.

I personally have been familar with the Seven Rivers area for 29 years. It is common knowledge that this area is full of sink holes, caves, and cavities. If the dam was built in this area, there would have to be extensive grouting work performed. The Bureau of Reclamations' own expert, Mr. Peter Aberle, indicated that grouting is an art; that a certain "feel" for the work is necessary; and that certainty is never possible.[1] If certainty is never possible thru grouting, why spend millions of dollars in a location that's known to have sink holes, caves and cavities of unknown intensities? .

The Carlsbad Irrigation District is in great need of a good water supply for their farmers. Brantley Dam as it is proposed will not alleviate this problem. Instead, there is a good possibility that it will leak and the farmers south of Carlsbad could find themselves with less water than they have today.

Brantley Dam as it is proposed will take in several thousand acres of prime agricultural land. Our farm is over 2,700 acres, in which close to 1,400 acres can be considered prime agricultural farmland. In my opinion, our farm is capable of out-yielding acre for acre any farm in the Pecos Valley due to its fertility.

In 1963, we started a feedlot for beef cattle that has a one time capacity of 23,000 head. For the last several years, Seven Rivers Cattle

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[1] Staff discussion with Peter Aberle, U. S. Bureau of Reclamation, Idaho Falls, June 30, 1976.

Co. has sold in excess of 50,000 head of fat cattle annually to packers for human consumption. Less than 1% of all manure produced has been sold. The remaining 99% of manure produced that wasn't sold has been returned back to the farmland for fertility that has taken years and years to build up.

A real good example of the fertility in this farmland was the 1975 wheat crop. The average farm in the Pecos Valley yielded approximately 65 bushels to the acre, while our farm yielded in excess of 100 bushels of wheat to the acre. When one considers the expense of farming per acre with the net return per acre, it's not hard to see how one acre of this highly fertile land is worth several acres of similar land in the Pecos Valley.

In 1955, we planted approximately 135 acres of pecan trees. Since then we have added to the acreage of trees. To give one an idea of the dollar value of this orchard we should produce in a normal year 250,000 pounds of pecans.

The primary reason for constructing our feed lot in 1963, was to insure the farm of having good markets for its' alfalfa hay and grain crops. Likewise with the feedlot being located on the premises of the farm it benefits greatly from convenience, freight on commodities, etc. As you can see immediately, each of our businesses compliments the other. With any part of eithe business sold or condemned, it would render the balance worthless to us.

If studies were properly made of causes of the flooding in the City of Carlsbad, one would find them clearly defined as being the huge amounts of water coming down Hackberry Draw and Dark Canyon. I'm told that when the water comes down from Hackberry Draw and Dark Canyon, it completely fills up the Lower Pecos River. Then when the water comes down the Pecos River from the north, it has no where to go but to overflow its' banks. Perhaps a reasonable and equitable means could be taken in the Hackberry Draw and Dark Canyon area to alleviate one problem and save millions of our taxpayers dollars.

We own in excess of 1800 acres of mineral rights. If one is familar with this area, it goes without saying, the worth of these mineral rights. As I understand it, if Brantley Dam is constructed, these mineral rights will be condemned, and all producing oil and gas wells will be moved. This being the era of our National Energy Crisis, giving up millions of dollars of natural resources available in this area, could be invaluable to our future.

In conclusion, I should hope the necessary consideration is given to the benefit cost ratio of Brantley Dam. I think it is evident that there is hundreds of millions of dollars in terms of farmlands, mineral rights, water rights, etc., that will be given up for the project. Besides that, the failure to construct Brantley Dam to hold water, or last but not least, to hold in itself, would be another Teton Dam Disaster.

STATEMENT OF D. E. CHRISTENSEN, PRESIDENT, REGIONAL LANDOWNERS GROUP, INC.

The Regional landowners Group is submitting this statement for the Record in opposition to funding of the proposed Narrows Unit in Colorado. Using 1978 figures, the $163,000,000 Narrows Unit is located in northeastern Colorado on the South Platte River and will displace 840 people, 256 families, and inundate 17,000 acres of prime irrigated farm land with a total of more than 45,000 acres removed from production.

The priority system of water storage in Colorado eliminates water for Narrows except for infrequent high water excesses which occur at unpredictable periods. In the past, several years have elapsed between such occurences. Historically, the value of the water retained in Narrows would in no way justify the cost of the proposed project. The Wildcat Reservoir is to be completed northwest of Fort Morgan, Colorado, and in operation in 1984 to furnish water for the coal-fired "Pawnee" power plant. "Pawnee" is to be operational in late 1981 and is to provide energy for Denver, Colorado. The Public Service Company is furnishing the capital to construct "wildcat". The average amount of water to be used by Public Service to generate power and for irrigation by the Riverside Irrigation System is 30,000 acre-feet annually.

In Colorado water court, first in use is first in time, regardless of conditional decrees. Currently an average of more than 30,000 acre-feet of water are being diverted annually in Morgan County alone, for well augmentation. The total well augmentation of the entire South Platte Basin may be 100,000 acre-feet annually. Also, the Badger-Beaver Conservancy District has been formed (an area south of Fort Morgan and Brush, Colorado) and has filed for 90,000 acre-feet of water for well augmentation. These practices and projects have developed since the Lower South Platte Conservancy District received its "Conditional Decree" for Narrows. Quoting from the Toups Corporation Engineering Report, Loveland, Colorado....."although the proposed U. S. Bureau of Reclamation Narrows project has a conditional water right of 1957, the Bureau has agreed to legally subordinate its right to that for all wells installed prior to 1968. This makes the right of wells in the Conservancy District project senior to Narrows. Hence, operations of the recharge program at the proposed flow rate and duration would not infringe on existing water rights."

Approximately 20 per cent of the 31,000 acre-feet annual average of Weldon Valley water the Bureau of Reclamation assumed it would purchase has been purchased by users outside the "take area" of Narrows. Should Narrows become a reality, the major portion of Weldon Valley water will be sold to interests other than Narrows.

According to the Bureau's Planned Report of Narrows, 133,000 acre-feet of water, including 31,000 acre-feet of Weldon Valley water, was projected to be available for irrigation annually from Narrows. Where is the water for the project with "Wildcat" getting 30,000 acre-feet, well augmentation, Morgan County 30,000 acre-feet, Badger-Beaver 30,000 acre-feet, an unknown amount for the entire South Platte Basin well augmentation, and a large portion of Weldon Valley water going to interests other than the Bureau?

This totals over 150,000 acre-feet annual average and probably over 200,000 acre-feet annual average. There is no firm irrigation water for Narrows.

In a news article, Clarence Kuiper, former Colorado State Engineer, related to the Fort Morgan Times, Fort Morgan, Colorado, that it will be very difficult to deliver water downstream from Narrows and that Narrows water will have little value. A copy of this article is enclosed.

Attached is a statement signed by the various members of the Irrigation Association of Water District #1 in opposition to Narrows. Three of these systems divert water above Narrows. The others comprise all of the ditches who divert water from the South Platte for the first 30 miles downstream from Narrows.

To date the Lower South Platte Conservancy District has been unable to sell any water that would supposedly be furnished by Narrows. More than five and one-half years have elapsed since the Lower South Platte Conservancy District and the Central Colorado Conservancy District signed a contract with the Bureau to construct Narrows. The farmers know - Narrows will have little irrigation water.

A copy of a letter from the Bureau indicating that signed sub-contracts by water purchasers must be filed with the Bureau to assure firm committment for repayment is enclosed. To date not one sub-contract has been signed.

During the past three years additional sprinkler irrigation has occurred within the Narrows take area. A soft water pipe line has been installed through the area which provides high quality domestic water to rural Morgan County. The former benefit ratio could not have included these improvements. Another minus for Narrows. Land in the area, with adequate water, sells readily.

The proposed interest rate for the repayment portion of the project is 3.25%. Certainly the interest rate should be increased to a figure that is abreast of the times. Applying today's interest rate, there can be no more than 25¢ returned for each dollar invested.

The rapidly developing "Front Range Area" will demand and will receive flood protection from the tributaries of the South Platte River. Future domestic water usage and energy needs will force construction of storage projects on the South Platte tributaries. Progressively, the high water flows of the South Platte will be reduced through tributary control. The 1957 conditional decree of 700,000 acre-feet of water annually will forever restrict up-stream development because there have been few years, since the turn of the century, that this decree would have been satisfied.

Senator Hart's statement, "The Narrows would let Colorado use its share of the South Platte River water, and use that water for productive farming," is debatable. Senator Hart clearly does not understand the hydrology of the South Platte. Water is diverted from the river, applied to farmland, and the portion not used by the crop "returns" to the river to be used by another farmer downstream. Approximately 300,000 acre-feet of water "returns" to the South Platte each year and flows into Nebraska. This 300,000 acre-feet "returns" downstream from Narrows, which is more than 100 miles upstream from the Colorado-Nebraska border. Senator Hart is seeking a simplistic solution to a complex situation. A liberal tactic of throwing money at a problem (Narrows) does not accomplish what is needed to best serve agriculture.

The Definite Plan Report of Narrows by the Bureau assumes purchase of Weldon water. The Bureau states in the same report that upon completion of the project it will deliver water to the farmer's delivery gate at a cost of $14.56 per acre-foot, and that this water will have to be subsidized, with Pick-Sloan power revenues, an equal amount of $14.56 per acre-foot.

The Weldon Valley Ditch Company is delivering to the farmers' delivery gates an average of 30,000 acre-feet of water annually for a cost of less than $1.00 (one dollar) per acre-foot. The total cost to farmers for 30,000 acre-feet of water delivered to their gates is $25,000.

After spending $163,000,000 (1978 figures) for Narrows, the Bureau projects that the annual cost to deliver 30,000 acre-feet of water to the farmers' gates will be $436,800 (14.56 x 30,000) plus a subsidy of $436,800 (14.56 x 30,000) Pick-Sloan revenues, for a total cost of $873,600 annually. This is nothing but legalized robbery!

The Bureau projected that Narrows would provide water for the equivalent of 123 farms (a debatable projection) but 97 farms would be taken out of production. A differential of 26 farms. The gain in farm units would have a cost factor of ($163,000,000 ÷ 26) $6,269,000 per unit.

Comments of former State Engineer, Clarence Kuiper, point out that Narrows can never be a significant recreation center.

Certainly, there should be no appropriations for Narrows as the water that could have been available for Narrows has been absorbed, through the priority system of water delivery and progressive irrigation practices by water users within the South Basin of Colorado.

Narrows would not provide a means by which Colorado could make beneficial use of its share of the currently unused portion of the waters of the South Platte River. Further, the Conservancy Districts have been unable to sell Narrows water, and will not in the forseeable future, as the project has no firm water potential. No sub-contracts to assure firm committment for repayment have been signed.

This statement is respectfully submitted, and it is requested that it be entered into the record.

April 1, 1978

Hon. James Carter
President of the United States
Washington, D. C.

Colorado Congressional Delegation
Washington, D. C.

Bureau of Reclamation
Washington, D. C.

Department of the Interior
Washington, D. C.

Gentlemen:

The Irrigationists Association of Water District #1, Water District #1, State of Colorado, is an unincorporated association of irrigation systems and ditches whose diversion structures are located in this District on the South Platte River between Kersey and Balzac, Colorado. The purpose of this Association is to provide a unified association to protect the common interest of irrigators within the area.

Many reasons have been advanced as to why the Narrows Dam should not be constructed. Such objections have been in the hands of the addressees and no useful purpose would be served in enumerating these objections. Attached hereto is a response to the Bureau of Reclamation's Special Report, Investigation of Review Issues Narrows Unit - Colorado, February, 1978.

The following irrigation systems or ditches are actively opposing the building of the Narrows Dam, the funding of the Dam and the control of the Dam. That such would be detrimental to the interest of the irrigators, the underground water users and the whole area where the irrigators are located.

The following is a list of the irrigators, their diversion works, the storage capacities and the total number of acres in District #1:

NAME	DIRECT	STORAGE	ACRES
Bijou System	1,050 c.f.s.	92,000	25,000
Riverside System	1,417 c.f.s.	126,000	24,000
Upper Platte & Beaver Ditch Company	233 c.f.s.		16,000
Lower Platte & Beaver Ditch Company	284 c.f.s.		16,000
Ft. Morgan Reservoir & Irrigation Company	325 c.f.s.		13,000
Jackson Lake Company	450 c.f.s.	70,000	14,000
Weldon Valley Ditch Company	165 c.f.s.		5,500
Deuel & Snyder Ditch Company	53 c.f.s.		2,000
Snyder-Smith Ditch Company	345 c.f.s.		3,000
Tremont Ditch Company			1,350
Union Mutual Ditch Company	46 c.f.s.		1,500
Tetsell Ditch Company	37 c.f.s.		1,100
Johnson-Edwards Ditch Company	150 c.f.s.		2,000
	4,555 c.f.s.	288,000 ac. ft.	124,450

TO WHOM IT MAY CONCERN

On February 27, 1978, the directors of the Riverside Irrigation District and representatives of Public Service Company of Colorado met and agreed upon the alternative most beneficial to both parties in regard to the construction of Wildcat Reservoir.

The alternative combination agreed upon is IV-B-2-5 as illustrated on page 23 of the Pre-Design Report for Wildcat Reservoir.

McCall, Ellingson and Morrill Inc., the consulting engineers for this project were instructed at this time to proceed with a final design of this combination of alternatives.

This 30,000 acre foot annual yield of the Wildcat Reservoir will be diverted from the South Platte River above the proposed Narrows Dam and will consequently decrease the amount of water available to Narrows by this amount.

Respectfully,

[illegible]

[illegible] A. Christensen

Jacob Kosman Jr	Bijou Systems
C. L. Hanna	Riverside Systems
[illegible]	[illegible] Mutual Ditch
Geo. B. Peterson	Snyder Smith Ditches Co.
B. Peterson	Union Mutual Ditch Co.
E. L. Hanna	Deuel & Snyder Ditch Co.
Barney Jones Pres.	Weldon Valley Ditch Co.
Justin [illegible]	Lower Platte & Beaver Canal

LETTER FROM JOE D. HALL, REGIONAL DIRECTOR, LOWER MISSOURI REGION, BUREAU OF RECLAMATION, U.S. DEPARTMENT OF THE INTERIOR

APR 12 1976

Mr. Don Christensen
Cochairman
Regional Landowners Group
24951 County Road 9-5/10
Weldona, Colorado 80653

Dear Mr. Christensen:

Recently, when you and other representatives of your group met with us, Mr. Etchison requested that we advise you as to the nature of the repayment commitment which would be required by the users of water from Narrows Unit.

Under the contemplated contractual arrangement with the United States, water would be delivered to the Lower South Platte Water Conservancy District (Lower South Platte) at the outlet of Narrows Dam and Reservoir, or delivered upstream to the Central Colorado Water Conservancy District (Central) by exchange. The districts, in turn, would deliver the water to the various ditch companies or districts at their points of diversion through individual subcontract arrangements.

Because of the limited general taxing capability of the districts (1 mill maximum for Lower South Platte, and 2 mill maximum for Central), it will be necessary to look to the subcontracts with the various irrigation entities for assurance of sufficient revenues to enable the districts to meet their payments to the United States.

The term of the subcontracts will be concurrent with each district's repayment contract with the United States. In order to furnish firm and binding repayment assurances, the subcontracts provide that any irrigation district purchasing water will levy and collect all necessary assessments on its lands, a mutual ditch company will levy assessment on its stockholders, individuals and corporations will grant the district the right to levy a tax on such lands in order to collect any unpaid water charges, and municipalities will grant the district the right to levy taxes on property in the municipality to collect any unpaid water charges. With these firm assurances of payment, there should be no need to use the limited general taxing authority of the conservancy districts.

We hope this information will be helpful to you.

Sincerely yours,

Acting for Joe D. Hall
Regional Director

[From the Fort Morgan (Colo.) Times, Wednesday, Apr. 5, 1978]

SAFE DAM POSSIBLE—WITH ENOUGH MONEY

(By John LaPorte, Times staff writer)

BY JOHN LA PORTE
Times Staff Writer

(Editor's note: This is the first in a series of three articles written from a Times and Associated Press interview with C.J. Kuiper, Colorado's state engineer. The interview was initiated by a request from The Times, and Kuiper repeatedly stressed that he was not taking a position either for or against the Narrows project. Kuiper's Narrows files are being kept at the state attorney general's office pending a lawsuit filed against the project by an opposition group into which the state has entered as a defendant.)

"You can build a safe dam anywhere if you spend enough money," C.J. Kuiper, state engineer, replied to a question on whether a safe dam can be built at the proposed Narrows site near Fort Morgan.

Kuiper figured that another cost estimate would be needed before it was known whether the cost of safety measures at the dam would be prohibitive, but he thought the U.S. Bureau of Reclamation, construction agency for the project, would have to make some alterations as a result of a recent independent review panel study by several experts of safety and seepage issues at the dam.

Final design of the project has not yet been completed.

"If I were building a dam with my own money," he stated, "there's no way I'd build it."

Review panel recommendations point to possible extension of slurry trenching, pressure relief wells and drainage blanketing on the dam's downstream toe.

The safety-seepage issue is just one of several on which Kuiper has repeatedly expressed concern to the bureau and to state officials. Apparently, that concern has not hit home with the dam going forward and the state's official position in favor of it with little or no consideration given to those concerns.

For example, Kuiper's office does not normally comment on federal projects, but early in 1976 his office was asked for comments on the Narrows. His office's report called attention to channel losses that pointed to probable heavy seepage at the Narrows site and to possible safety ramifications. His department's reports appeared in news media about the same time Gov. Richard Lamm announced state support for the project.

Kuiper pointed to heavy channel losses between Kersey and Weldona gauges in the area where Narrows is to be built. From May 21 to July 16, 1965, there were 62,000 acre-feet lost to channel losses, 76,698 in 72 days in 1967 and 252,756 in 53 days in 1973.

In all cases, Kuiper noted, diversions between the two gauges were taken into account and added to the Weldona gauge which meant heavy seepage losses.

This, the engineer said, was enough of a loss for concern about whether the reservoir would hold water.

Steady state studies have been made based on the reservoir being filled to a certain level and held there, but Kuiper said a transient state study should have been made with water going up and down. When alluvial material in the dam area drains, he pointed out, the movement of ground water is accelerated. The U.S. Geological Survey is making such a study, he added, with completion about a year away.

A Woodward and Clyde engineering report also said that the bureau design was reasonable under a steady state but that there could be some slumping under rapid drawdown. The upstream side of the dam should be redesigned for rapid drawdown, the report suggested.

Kuiper outlined the basic problem at Narrows as alluvium sloping downward to a bedrock of shale with the shale getting deeper and deeper from near the end of the dam going south to an ancient river channel far underground, some 150-feet lower than the existing river channel. The alluvium — silt, gravel and other porous material — is highly pervious, allowing water to slip through easily. River flows over 500 cubic feet per second push water over a hump in the shale and it travels down the alluvium toward the old channel.

Kuiper is concerned with water slipping around the end of a slurry trench the bureau proposes to put down to shale at the dam's south abutment and back to the downstream to the dam.

The material is different from the Teton dam, but basically, the pattern was the same — badly fractured rhylite rock allowed leakage to the downstream toe, although it was thought grout had sealed the leaks. The dam collapsed from the downstream side.

The Narrows dam might need extension of the slurry trench, depending on the extent of porous material. Also, pressure relief wells to keep water pressure from becoming excessive in the downstream toe area of the dam and a drainage blanket on the downstream toe to allow water out without tearing up the downstream toe might be needed.

Geology well logs near the dam, Kuiper noted, supported the concern about pervious material with 2,500 to 3,000 gallons a minute coming through indicating, he said, "pretty damn porous" material.

All of this led to a memo to Harris Sherman, director of the state's Department of Natural Resources, on the concerns of Kuiper's department.

Members of the Regional Landowners Group, the opposition coalition with the pending lawsuit, obtained a copy of that memo when they asked for it. The memo, Kuiper said, was public record: "They can come in and have a copy of anythng in this office."

Kuiper was asked at a meeting of the review panel of geological and engineering people if he had questions, and he asked the experts if they would like to wait for the transient study. They indicated they would. The report, however, was due too soon.

His questions also addressed porosity of the material, and the panel indicated a safe dam could be built. However, cost was unknown, as the slurry trench might have to be extended and the alluvium is up to 250 feet deep south of the dam.

He had no argument with the consultants, he said, but they did not specify how far the safety measures would have to go. The apparent course is to start building first, then decide.

"I'd like to know what it's going to cost," he said.

[From the Fort Morgan (Colo.) Times, Thursday, Apr. 6, 1978]

GETTING WATER DOWNSTREAM BIG QUESTION

(By John LaPorte, Times staff writer)

By JOHN LA PORTE
Times Staff Writer

(Editor's note: This is the second in a series of articles written from a Times and Associated Press interview with C.J. Kuiper, state engineer. The interview was initiated by a request from The Times, and Kuiper repeatedly stressed that he was not taking a position either for or against the Narrows project. Kuiper's Narrows files are being kept at the state attorney general's office pending a lawsuit filed against the project by an opposition group into which the state has entered as a defendant.)

As far as getting water downstream is concerned, the proposed Narrows reservoir near Fort Morgan is "a pig in a poke," in the words of C.J. Kuiper, state engineer.

U.S. Bureau of Reclamation estimates of downstream losses of 15 per cent are very low, Kuiper claimed. "My Biggest complaint is I don't think people know what the hell they're getting."

He cited an example of a meeting in Sterling in which an official of the Fort Morgan Canal, which comes right out of the reservoir, thought the canal was safe from any large losses because of its proximity to the project.

Kuiper, however, claimed at that meeting—a claim he said bureau officials acknowledged—that all users would have to share downstream losses equally.

In other words Morgan Canal would have as much downstream loss to stand as South Reservation Ditch near Sterling.

Those losses could be very high—to an individual requesting information on how much Narrows water he could expect at South Reservation Ditch, Kuiper's office replied, after study of stream flows, that based on one year's experience he might not get any—zero to 10 per cent of the water released would get to the headgate from Narrows. During one year South Reservation cut off 40 second-feet upstream and never saw any.

There is also the question of an exchange program in the Central Water Conservancy District upstream from Narrows.

"They use the magic word 'exchange,'" Kuiper said. The idea is that water from the Narrows could be used to alleviate damage to other water rights from wells in the district by replacing water drawn by those wells. However, those wells injure rights upstream from Narrows, according to the engineer.

How does the water get upstream?, he asked—the answer is the magic word "exchange."

He commented, "We do an awful lot of water exchange, but I've never found a way to run water uphill."

As for use of Chatfield to store exchange water, Kuiper reported that the U.S. Army Corps of Engineers has prohibited that—that reservoir is for flood control and the Corps will not allow storage of conservation water there.

In short, there is the word "exchange," but apparently no real viable method of exchange shown to make that word any more than a "magic word."

The same channel losses that led to Kuiper's concerns about safety, discussed in the first article of this series, also lead to water supply problems—holding the water impounded in the reservoir for use as needed without excessive seepage losses. Bureau estimates figured year-round losses instead of losses during the peak irrigation season in mid to late summer when users will draw water, Kuiper asserted.

Kuiper also questioned whether the bureau could get enough water to fill Narrows in the first place—of the over 130,000 acre-feet the bureau is figuring will be available, Kuiper figures a substantial amount will not be, as does his deputy, Jeris A. Danielson.

The bureau is counting on 32,000 acre-feet from the Weldon Valley ditch, the engineer said. That will not be so even if the bureau would get all of that water, Kuiper and Danielson claimed. The 32,000 acre-feet is based on consumptive and return flow use—consumptive use being about 40 per cent and return flow about 60 per cent.

In other words with all Weldon Valley water rights only 40 per cent 12,800 acre-feet of the 32,000 acre-feet would be available for Narrows.

The engineers claim that little if any of that water will be available. Weldon Valley ditch water rights, senior to Narrows, are being sold off to other users, particularly to the Riverside district.

Riverside has a primary decree for filling the existing reservoir and a secondary decree for its proposed Wildcat. The decree date is 1904 and is for 57,580 acre-feet.

Add that to the 32,000 for Weldon Valley and over 89,000 acre-feet of the bureau's 130,000 is gone elsewhere—to decrees senior to Narrows.

The Wildcat is not something far down the road, either, the engineers added. Public Service Co. wants some of the water for its Pawnee Power Plant now under construction near Brush and is working with Riverside to build the Wildcat. Plans are now being prepared to put the Wildcat under construction.

[From the Fort Morgan (Colo.) Times, Friday, Apr. 7, 1978]

RECHARGE A BETTER ALTERNATIVE?

(By John LaPorte, Times staff writer)

By JOHN LA PORTE
Times Staff Writer

(Editor's note: This is the third and final article in a series written from a Times and Associated Press interview with C.J. Kuiper, Colorado's state engineer. The interview was initiated by a request from The Times, and Kuiper repeatedly stressed that he was not taking a position either for or against the Narrows project. Kuiper's Narrows files are being kept at the state attorney general's office pending a lawsuit filed against the project by an opposition group into which the state has entered as a defendant.)

Ground water recharge could be a more viable alternative to the Narrows than U.S. Bureau of Reclamation officials indicate, data from the office of C.J. Kuiper, state engineer for Colorado, indicates.

Kuiper's office has data from a ground water recharge demonstration project conducted by the U.S. Geological Survey, Colorado State University and Ground Water Appropriators of the South Platte that indicates ground water could be stored for about $2 an acre-foot.

In the project culverts were borrowed and a canal extended to two storage ponds in the Merino area. The canal and ponds were abandoned due to heavy leakage, but the ground water storage principle calls for just that — leakage to get the water underground.

Monitoring wells and gauges at the entry point and below the recharge area were used.

Obviously, when compared to Narrows (about $14.25 an acre-foot), the water in the recharge project would be cheaper, Kuiper pointed out.

The U.S. Bureau of Reclamation, construction agency for the proposed Narrows reservoir near Fort Morgan, has claimed it would cost more for ground water recharge than for the dam and reservoir.

Kuiper cited the proposed Badger-Beaver project south of Fort Morgan and Brush as having "tremendous potential" if there is a free river. However, Narrows would stop any possibilities of a free river, stopping everything when there is no call downstream.

It is an either-or proposition—you cannot have both Narrows and further development of recharge. "If you do build Narrows, it's an irreversible act," Kuiper said. Upstream water development, he said, would be impossible.

Kuiper's office has a staff member checking out bureau figures on ground water recharge. The bureau claims a .8 to 1 benefit-cost ratio for ground water recharge. However, bureau studies apparently include a number of new wells where existing wells could be used.

Jeris A. Danielson, Kuiper's deputy, questioned recreation benefits and flood control. Recreation use, he said, would be heaviest in July and August, precisely when drawdowns for irrigation are at the maximum. Kuiper referred to a mud flat situation being possible in those months with the heavy drawdowns.

As for flood control, Danielson felt Chatfield, Mount Carbon and Cherry Creek would handle upstream waters that could create flooding. Tributary flooding such as Bijou Creek would not be controlled by Narrows.

Proponents of the dam often point to unused water flowing into Nebraska as a reason for building Narrows. This, Kuiper said, is a falacy. Although one-third of one million acre-feet a year have flowed past the Julesburg station and into Nebraska, it is mostly return flow from below Narrows.

In other words it is water that has been used. Most of the flow, Kuiper said, would continue even if Narrows were built. Some could be preserved by Narrows, but there is a compact between Colorado and Nebraska concerning minimum stream flows of the South Platte into Nebraska.

Kuiper questioned whether liens were on homes in the water districts buying Narrows water. Bureau and Lower South Platte Water Conservancy District Officials have said there are not — there is a slight mill levy, and non-payers of property taxes could wind up with liens, and customers for Narrows water not making payments could wind up with liens also, officials of those entities said.

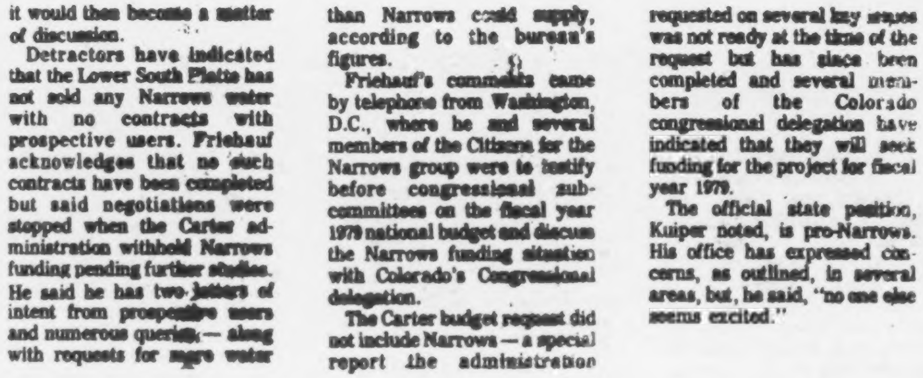
Detractors of the Narrows have said a possiblity of clear water damage exists — water with silt and other solids settled out as the water sits in the Narrows reservoir.

Kuiper said that this possibility does exist, particularly for two ditches drawing directly from the reservoir and for those short distances downstream before the water would, by scouring action on the river, pick up more solids.

Narrows opponents claim that the bureau has divested itself of any liability for clear water damage and passed the responsibility on to the customer districts. Although bureau officials said that a Lower South Platte and bureau contract does not say anything one way or the other about liability for clear water damage, it does say that the bureau does not guarantee water quality.

Gary Friehauf, secretary-manager of the Lower South Platte, calls the clear water damage argument a "when did you quit beating your wife" argument, presupposing a problem. He does not think there will be any such problem. There is no evidence, he said, that a claim there might be such damage has any validity.

The bureau, Friehauf added, has contracted with the U.S. Geological Survey to study the river and canal systems to see what the silt content is now at various times of the year. If it changes after Narrows is built,



it would then become a matter of discussion.

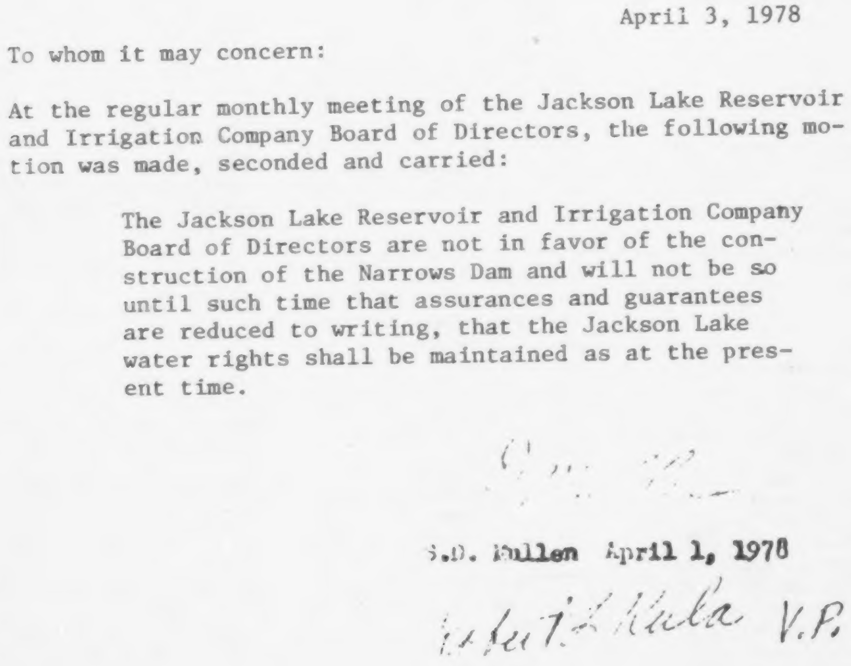
Detractors have indicated that the Lower South Platte has not sold any Narrows water with no contracts with prospective users. Friehauf acknowledges that no such contracts have been completed but said negotiations were stopped when the Carter administration withheld Narrows funding pending further studies. He said he has two letters of intent from prospective users and numerous queries — along with requests for more water than Narrows could supply, according to the bureau's figures.

Friehauf's comments came by telephone from Washington, D.C., where he and several members of the Citizens for the Narrows group were to testify before congressional subcommittees on the fiscal year 1979 national budget and discuss the Narrows funding situation with Colorado's Congressional delegation.

The Carter budget request did not include Narrows — a special report the administration requested on several key issues was not ready at the time of the request but has since been completed and several members of the Colorado congressional delegation have indicated that they will seek funding for the project for fiscal year 1979.

The official state position, Kuiper noted, is pro-Narrows. His office has expressed concerns, as outlined, in several areas, but, he said, "no one else seems excited."

LETTER FROM JACKSON LAKE RESERVOIR AND IRRIGATION CO. BOARD OF DIRECTORS



April 3, 1978

To whom it may concern:

At the regular monthly meeting of the Jackson Lake Reservoir and Irrigation Company Board of Directors, the following motion was made, seconded and carried:

> The Jackson Lake Reservoir and Irrigation Company Board of Directors are not in favor of the construction of the Narrows Dam and will not be so until such time that assurances and guarantees are reduced to writing, that the Jackson Lake water rights shall be maintained as at the present time.

S.D. Mullen April 1, 1978

V.P.

STATEMENT OF RICHARD HOWELL, NEW MEXICO

I wish to present my concern and possibly some information about the proposed Brantley project.

My name is Richard Howell and I have lived in the immediate area for 47 years. During this time, I have observed the people in the city of Carlsbad steadily build down into the very stream course of the Pecos River. They have built two dams to hold up the Pecos within the city and have built houses to the water's edge with no regard for flood safety. Therefore, it should be more of these peoples' expense and responsibility to provide flood control for themselves. Clearing and possible channeling of the Pecos through Carlsbad would carry not only the Pecos, but Rocky Arroya and Dark Canyon waters past Carlsbad without endangering lives and other property.

I question why this alternative was given hardly any study. The cost might be somewhat greater but the safety factor considering controlling Rocky Arroya and Dark Canyon also would be very, very much greater than Brantley Dam.

In the Supplement to Environmental Statement, I find a very interesting sentence that is very probable the only truth in the entire E. I. S. This is on page I-3 Purpose and Need and is the first sentence in item B-3 Flooding Problems. I quote--"Carlsbad and vicinity are subject to flooding from the Pecos River and area tributaries, particulary DARK CANYON DRAW."

Since Brantley Dam would be built above Dark Canyon and also the very large tributary, Rocky Arroya, Brantley would not nor could not solve the flood problem as proponents of the proposed Brantley project so claim.

I find no mention of studies made to determine the effect a large new body of water, with resulting leakage into the sub-strata, will have on the proposed Waste Isolation Storage Facility in the nearby area. It is alarming to read in the modified E. I. S. that the dam had to be moved 2100 feet downstream because the first proposed sight was cavernous and the bottom and East bank consisted of gypsom and many other soluble minerals. Any water impounded in Brantley would encounter this area. Therefore, it is certain, leakage would occur.

Mr. Raymond Lamb is a geologist and engineer, who has studied the Hydrology and formations to the East and South of the proposed Brantley project. Mr. Lamb is on record as saying that in this area the geologic formations and ground water flow slope from Northwest to Southeast. I believe most other geologists will confirm this.

The proposed Waste Isolation Storage Project lies only 30 miles to the Southeast of the proposed Brantley project and the probability is great that Brantley leakage will reach the WIPP Project. Therefore this should have been considered and certainly should be investigated thoroughly before either one is built.

LETTER FROM GIL MOUTRAY, SEVEN RIVERS CATTLE & FARM CO., INC., N. MEX.

It seems that the purposes of Brantley Dam are well defined to be flood control, more water for the C.I.D., and for recreational purposes.

Addressing the flood control aspect of Brantley first, which seems without question the purpose that's stressed the most, there are considerable amounts of controversy in this area. There are statements made that without Brantley there is continued threat of loss of lives, and valuable property within the Carlsbad Area.

According to the records, there hasn't been any loss of lives attributable to the Pecos River north of Carlsbad. In fact, the major causes listed were flood waters from Dark Canyon.

Valuable property in the Carlsbad area has been threatened many times, and would continue to be threatened whether Brantley Dam was constructed or not. The problems that exist are that everyone continues to overlook that in fact the Pecos River channel south of Carlsbad is not large enough to adequately handle the tributaries that flow into it south of the proposed Brantley Dam construction site and west of Carlsbad.

In regards to the draft supplement to the Final Environmental Statement page I-3 bottom paragraph, it summarizes the damages caused by the August 23,1966, flood to be at $1,047,0000. It pointed out that the flood resulted in a peak discharge of 54,400 ft. 3/S in the Pecos Rivers, which the majority came into the Pecos River below the Brantley Dam site, and 66,000 ft. 3/S from Dark Canyon which flows into the Pecos River from west of Carlsbad. Due to the location of Brantley so far north of Carlsbad, it seems from a practical standpoint it's hard to rely on it for very much flood control directly in the vicinity of Carlsbad.

Another major purpose for the project is to provide the C.I.D. with more water for irrigational purposes. As decades go by, it's history in this area that there is less and less water available. But now, due to the present plan we have to agree to release 20 ft. 3/S down the Pecos River for the duration of the project. What happens when we have discharged all the excess water and now only have the 42,000 acre-feet conservation pool remaining? As provided for in the present plan, existing water rights will have to be aquired, and wells pumped at the expense of the taxpayers.

There are numerous persons in the local area that have devoted their life to the geology in this area. It's hard to believe when a team of independent geologists were hired to study this project that none of these people were contacted. Raymond Lamb who is a certified geologist residing in Artesia, New Mexico, testified in the 1977 hearing before the Army of Corps. of Engineers that the type of formation beneath the surface within the area of Brantley was one which would require tremendous amounts of grouting to prevent it from leaking as does McMillian. As one of the Bureau of Reclamation's own people in the report of the Teton Dam disaster admitted that grouting was never a certainty.

It's hard to appreciate the fact that Brantley will do any more than replace Lake McMillian for recreation. Anytime you design a reservior with the capacity fluctuating from a dried up mud hole of 42,000 acre-feet to 520,000 acre-feet, it's a little hard to envision a beautiful recreation facility that people would drive from miles around to participate in.

Summarizing my views about the Brantley Dam Project, it's hard for me to accept the cut and dried fact made by the Water and Power Resources Service that there isn't an alternate plan. For the $200 million to be spent on the project, there has got to be a better way to provide us with TRUE flood protection without throwing tax dollars down the drain.

Concerned Taxpayer

Gil Moutray

H. Gil Moutray

STATEMENT OF SARAH CAMDEN FOR WATERSHED ASSOCIATES RESCUE

SUMMARY OF TESTIMONY

Missouri River Levee Unit R-616

The people of the area affected by Unit R-616 of the Missouri River Levee System oppose construction of the project and request that funding be denied.

Construction of the project would leave residential areas between the levee and the Missouri River. These homes will be in a floodway, where they cannot be rebuilt if partially destroyed, whether by flooding or other occurrence. Construction of the levee is supported by benefits allegedly arising from protection of agricultural lands; but construction of the levee (as the Corps of Engineers concedes) will result in industrial development of these lands. Moreover, this encouragement of flood plain development is contrary to federal policy as expressed in Executive Order 11988. The project will not protect against flooding such as occurred in 1978, when the Platte River backed up above its confluence with the Missouri River and flooded the area from the landward side. In such a case, the levee could prevent escape of floodwaters. The Fish and Wildlife Service has expressed objections to the project.

Construction of the project is currently enjoined for failure to prepare an adequate environmental impact statement.

My name is Sarah Camden. I am a member of the Board of Directors of Papio Natural Resources District. I am appearing, however, as a private citizen, and as the Secretary of an association of concerned citizens, in opposition to funding of a project which the District has supported in the past. The reason for this unusual circumstance deserves some explanation.

The project which I oppose is Unit R-616 of the Missouri River Levee System. I am appearing here not merely for myself, but for the members of my association, Watershed Associates Rescue, and for the thousands of residents of my area who voted to elect me to the Board of the Papio Natural Resources District.

For those members of this Subcommittee who are not familiar with Nebraska government, I should say that Papio

Natural Resources District is a political subdivision of the State of Nebraska. It is the governmental body which is acting as local sponsor of the Unit R-616 project. By condemnation of property, it has provided the land on which the levee is built. Unit R-616 is one unit of a system of levees along the Missouri River authorized by Congress in the Flood Control Act of 1944. The entire system consists of 136 proposed levees, which would reach from Sioux City, Iowa, to St. Louis, Missouri. However, since 1944, the Corps has been able to construct only about 25 units. It has not been able to show any economic justification for the rest. Until recently it had not been able to show any net benefits from Unit R-616 either; and we, the people of the area, can tell you that there will never be any net benefit from it. We can also tell you that we do not want the project built.

To give you an idea why we oppose the levee, let me describe the project for you. There is a small map of the area in a newspaper article attached as Exhibit A to my written statement. As it shows, the levee is located near Bellevue, Nebraska (just south of Omaha). It will extend along the west bank of the Missouri River for a distance of 4.5 miles. The levee is located fifteen hundred feet west of the center line of the river channel, about a thousand feet from the bank. As the map shows, there are two housing areas located between the levee and the river. I live in one of those areas. I can assure you that I don't want my home to be between a levee and a flooded river; and my neighbors don't want theirs to be either.

The Corps has told us that the river won't raise the water enough to make any difference to our houses--that it won't raise the water level more than an extra tenth of a foot during a 100-year flood. Well, I don't believe the Corps. They have told us some other figures at different times. But if that figure is right, then why are they building the levee? And why are they proposing to build it fourteen feet high? A levee that only keeps in a tenth of a foot of water isn't much protection to what's behind it. If it is fourteen feet high, it is not being built to hold back a tenth of a foot of water.

Another effect of the levee will be that my neighbors and I will all be living in a designated floodway once the levee is built. Under the federal law and state rules for flood plain protection, a house in a floodway cannot be rebuilt if it is more than fifty percent destroyed. This means that if a damaging flood does come--or even if there is a fire or a tornado--we will never be able to rebuild our homes.

I personally first learned of this project in 1975, when the Corps of Engineers held an informational meeting about it. I was there along with about a hundred other people, and we were all against the project. I don't think the Corps of Engineers was interested in what we thought. They listened to what we had to say and then went away, and we didn't hear any more for three years. Then we learned from the newspapers that the levee was going to be built. Papio Natural Resources District came in and started condemning farm land. The people of the area organized to fight. We formed an association called Watershed Associates Rescue--WAR, for short--and we went to war with the Corps and the Papio Natural Resources District. We hired a lawyer and filed a lawsuit, and we got an injunction against construction of the levee. The judge ruled that the Corps had not considered all of the environmental impacts of the project.

That was in September 1978, and the project has been enjoined ever since. But it hasn't gone away. It won't ever go away as long as the Corps has money to build it. That's why I am here today, to ask you not to appropriate funds to build the levee. In a time when the federal government is finally trying to get its own spending under control, it would be a tragedy to spend money on a project that the people don't want and that won't do what it's supposed to do.

When I say that this levee won't do what it's supposed to do, let me refer to the testimony of Papio Natural Resources District before this Subcommittee last year. Then, the district told this Subcommittee that the levee would protect 3,950 acres of flood plain, of which 3,315 acres are agricultural; that it will protect Offutt Air Force Base and the Omaha sewage treatment plant; that it would have protected against the flooding which occurred in 1978; and that it will provide wildlife habitat. There is a little bit of truth in what the District said. There is also a lot of stretching the truth and a lot of truth left out.

It is true that the Corps of Engineers designed the levee to protect farm land. The benefits which are claimed to justify the construction are based mostly on protection of crops in the field or stored grain. I don't believe the Corps' figures. The expert in agricultural economics whom we contacted for the lawsuit (a University of Nebraska professor) didn't believe them either. For one thing, during the time of year when Missouri River floods are most likely, there aren't any crops in the field; and grain does not have to be stored in the flood plain. It would be a lot cheaper to raise the corn cribs or store the grain somewhere else than to build a levee.

Not only that--a flood isn't necessarily a disaster for a farmer. There are members of our organization who have farmed in the flood plain for 50 years or more and never lost a crop. The only damage they have had has been having to pick up the beer cans and bottles that the flood brings in. In fact, crops are often better in a year when flooding has occurred, because of the plant nutrients brought in by the flood and the moisture left in the soil. I have attached as Exhibit B a newspaper article that shows that this was true for the Platte River flooding in 1978, which Papio Natural Resources District referred to in their testimony last year.

A second point to keep in mind about the Corps' claim to protect agricultural land is that if the levee is built, the land isn't going to remain agricultural land. I have attached as Exhibit C to my statement a copy of an article from the Bellevue Leader from 1978. The land behind the levee is in the City of Bellevue's zoning jurisdiction. This article shows what Bellevue's plan for the area is, once the levee goes in. If you look at Exhibit C, which shows the levee running from Haworth Park down to the Platte River, you will see what will be in the area according to Bellevue's plan: a free trade zone, a future industrial zone, Bellevue Industrial Tract No. 1, and--off in a corner--a "wildlife sanctuary." I don't know how well the wildlife will mix with the factories. Clearly, Bellevue plans to convert this land to industrial use. In the environmental impact statement on the project, the Corps conceded that construction of the levee will lead to this sort of development. This is contrary to the provisions of Executive Order 11988, which requires federal agencies to do everything they can to prevent development of flood plains.

A third point is that this levee will not prevent all flooding of the area. The 1978 flooding came from the Platte River. Attached as Exhibits E-J to my statement are a series of photos which show that in 1978 the Platte River backed up where it joins the Missouri. On the west side of my home, behind where the levee would be, the land was flooded. There was no flooding from the Missouri River side. The levee would simply have held this water from running back to the river.

Last year, Papio Natural Resources District testified that Unit R-616 would protect Offuct Air Force Base and the Omaha sewage treatment plant. In fact, as my photos show, Offutt is protected by existing levees. The sewage treatment plant is high enough that it wasn't flooded in 1978; it could easily be protected by a ring dike.

Papio Natural Resources District also testified that the project offers benefits to wildlife habitat. The United States Fish and Wildlife Service disagrees. I have attached as Exhibit D a copy of a letter dated April 21, 1980, from the Area Manager of the Fish and Wildlife Service to the District Engineer of the Corps. This shows that the levee raises wildlife issues of concern to the Fish and Wildlife Service which have never been addressed.

In view of what I have said, I think you can understand why the people of the area don't want this levee.

You may ask why Papio Natural Resources District is still supporting the project. There is one reason only--the money to acquire the property has already been spent. If it weren't for that, I can assure you that the board would back out of the project. My comment is, let's not throw good money after bad. Many board members now agree with me. I think more will agree with me in the future, because the people don't want this levee. That fact that I am here today shows that we don't want it. We aren't wealthy people; but we collected money to get me here to testify. The fact that I am a board member of Papio Natural Resources District shows that we don't want it. I am not a politician. I've never run for office before. I ran for the Papio Natural Resources District board strictly as an opponent of this levee. I spent twenty-five dollars on my campaign. I received over 55,000 votes. I was the only candidate to defeat an incumbent. That says something about what the people think.

I say it is time for the voice of the people to be heard on this project. That voice says, we don't want it!

We ask this subcommittee to deny funding for the levee, and to do whatever else it can to see that the levee is never built.

[From the Omaha (Nebr.) World-Herald, Thursday, July 13, 1978]

FLOOD CONTROL DISCUSSION: DAMS PROPOSED ON LOUP

(By Fred Thomas, World-Herald staff writer)

Fremont, Neb. — A new approach surfaced Wednesday evening to protect eastern Nebraskans from floods — building dams on the Loup River above Columbus.

They would help prevent a repeat of the March flood that devastated Valley and damaged other communities in the Fremont-Omaha areas, the Army Corps of Engineers was told.

And dams would store water for Nebraskans that will be needed to replace water taken out of the Platte by Colorado, Wyoming and outstate Nebraska interests.

The proposal for Loup River dams drew heavy support as a standing-room-only crowd of more than 150 people crowded the Fremont City Council chambers for a corps-sponsored public meeting on suggestions for reducing Platte flooding from Schuyler to Plattsmouth.

The corps and Gov. J.J. Exon drew both praise and criticism as 25 persons testified.

Eight persons recommended dams on the Loup.

Typical was E. L. Keim, longtime Fremont drainage official, who said the Loup annually thaws earlier than the Platte near Fremont, and pours its water onto the frozen Platte, compounding the flood potential.

The Loup's water should be stored at least until the ice and high water has gone out of the Platte, he said.

'Primary Salvation'

Lyle Gill, Fremont city attorney, said, "the primary salvation of eastern Nebraska is the water of the Loup River because the Platte already has been drained."

Gill said mining, power and irrigation interests, especially in Colorado and Wyoming, already have overappropriated the Platte's water west of Duncan, Neb. and plan to suck out much more.

Dams on the Loup would ease this growing shortage, he said.

Also recommending dams were spokesmen for the Loup Public Power District, Dodge County Board, Lower Platte Natural Resources District and individuals.

There was considerable discussion over whether raising and strengthening dikes, such as the Union Dike that broke near Valley, would ease the flooding.

Several speakers agreed with Harold Elijah of North Bend, who said dikes can't handle ice jams and heavy June rains.

"Until we convince ourselves that dikes can't do the whole job, we're going to be in trouble," he said.

The strongest criticism came from John Poehling, operator of the Woodcliff housing area south of Fremont.

"My question, colonel, is when are you guys going to quit studying (the Platte) and do something?" Poehling told the moderator, Lt. Col. Tom Hicklin.

Corrective Action

Poehling said that in every flood since 1940, the corps has done a fine job of emergency work during the crisis. Then it has studied the situation but it has not followed through with corrective action, he said.

"What in hell happens to all those studies," he asked.

Poehling said he isn't waiting for the corps to act but is completing a private dike around Woodcliff.

Leroy Widman, a drainage district official from Yutan, said one answer is "to keep people from encroaching on the river." He said Nebraska has plenty of laws, but lacks public officials "with backbone to keep developers from subdividing the river."

Spencer Dam Given a Year

Dan Drain, director of the Nebraska Department of Environmental Control, said Wednesday the department will grant a one-year variance for the Nebraska Public Power District's continued operation of the Spencer hydroelectric dam on the Niobrara River.

At a public hearing in May in O'Neill, NPPD asked to be allowed to continue periodically flushing silt, which builds up behind the gate and halts the electric facility's operation.

Hearing officer Joseph H. Badami's recommendation to Drain was to grant a variance because most testimony during the two-day hearing was from area people supporting operation of the dam. Badami said it does not appear the flushing has violated Nebraska water-quality standards.

[From the Omaha (Nebr.) World-Herald, Saturday, July 15, 1978]

SARPY FARMER LOVES VIEW: LUSH, GREEN CORN

Mr. and Mrs. Ward Smith's front-porch view these days is one which only a veteran farm couple can fully appreciate: a lush field of green corn.

And this retired Sarpy County couple, living west of Hansen Lake at 5005 LaPlatte Road, savor the view.

"It's looking real nice, the best in the last three years," said the 75-year-old Smith. "Now let's hope it keeps raining."

Smith and his wife, Florence, now retired for 10 years, rent out the 160-acre farm. Besides keeping daily tabs on their crops, the Smiths keep close to the soil by gardening.

Smith's corn is typical for Sarpy County and most of Nebraska this year — and if the weatherman cooperates, the state will harvest its second-best crop in history.

"Despite delays in getting the crop planted this spring, the outlook is excellent," said Sarpy County Agent Robert Woolman.

Much of the corn was planted two weeks late, he said, but the hot, humid weather along with plentiful moisture is allowing it to make up for lost time.

"We've probably regained eight to 10 days of that delay," he said, "because of ideal growing conditions."

Sarpy County has about 65,000 acres of corn, the county's largest cash crop, according to Woolman.

Although about 8,000 acres are grown under irrigation, most irrigators haven't yet cranked up their systems, Woolman said.

Earlier this week the Nebraska Crop and Livestock Reporting Service estimated the state's corn crop at 585.9 million bushels, the second largest in history, from an average yield of 93 bushels per acre.

Smith is keeping his fingers crossed that his corn will be better than the average.

LETTER FROM JAMES W. SALYER, AREA MANAGER, FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR

April 21, 1980

Colonel Vito D. Stipo
District Engineer
Corps of Engineers, Omaha District
6014 U.S. Post Office & Courthouse
Omaha, Nebraska 68102

Dear Colonel Stipo:

On February 5, 1980, we responded to your January 1980 Supplemental Information Report (SIR) for Missouri River Levee Unit R-616, Sarpy County, Nebraska, by indicating that we believed the project was significantly different than what we previously had addressed in our May 23, 1975, letter prepared under the authorities of the Fish and Wildlife Coordination Act (FWCA). In a February 14, 1980, meeting in your office, you questioned our authority to respond further under the auspices of the FWCA; whether our May 23, 1975, letter was adequate; and what specific differences we were referring to. Also, during the February 14, 1980, meeting, you requested I sign a memorandum indicating that the February 5, 1980, letter did not necessarily represent the Service's final views toward the project and, further, that the Service would provide, in writing, as expediently as possible, any modification to that February 5, 1980, letter. This letter serves as our views on the project and a response to the issues you raised.

We contend that it is not only our authority, but our responsibility, to comment further on projects when the project has been significantly changed since our previous comments were made or when significant new or further project information is provided. We disagree with your opinion that we have no further responsibilities to comment under the FWCA after the project is authorized and refer you to your own permit regulations regarding coordination with our agency under the auspices of the FWCA. Such coordination is often not sought until long after a project has been authorized.

There are certain questions and irregularities in the manner in which the FWCA responsibilities were handled in regard to this project. Rather than go into a long project review, we will simply provide our conclusions that: (1) A considerable lapse occurred between the time a decision was made to reevaluate the project and the time the Service was notified of the study underway (a procedure not in accordance with the FWCA). (2) The Service repeatedly expressed concerns about wildlife issues and special concerns about secondary or indirect impacts to wildlife (some of these issues have never been addressed). (3) Contrary, at least to present procedures, a DEIS was prepared previous to a formal FWCA report; in fact, the DEIS was used as an information document for further Service response. (4) A question exists as to whether the May 23, 1975, letter would meet the legal questions of an adequate FWCA report; the issues being (a) no mention is made in the letter that this is the FWCA report for the project and (b) there is no indication in the letter that this "report" was either coordinated with or received concurrence from the state wildlife agency. (5) The Service has never indicated that either the DEIS or Final is adequate from the wildlife standpoint, and, under present procedures, would have to indicate that it is, indeed, inadequate in regard to addressing wildlife mitigation needs. (6) Only one of the three Service recommendations for mitigative action was adopted; unmitigated wildlife losses still exist. Our position has always been that wildlife was not fully and equally considered in project planning.

The issue regarding the differences between what we addressed in our May 1975 letter and the SIR would require extensive display. Although not intended to be a complete listing of differences, the following outlines some of the most obvious changes in information or assumptions: (1) The location, size, and assumed use of the borrow pits are changed; (2) The source of levee material is now definite (i.e. river borrow eliminated); (3) The size of the protected area has changed by 30 acres; (4) Assumptions on floodway development are changed from restricted development to intensive development of homes, cabins, and marinas; (5) Wildlife habitat losses are now identified, and land-use changes as a result of the project are now provided; and, (6) New project alternatives are presented that were not addressed earlier.

In regard to our 1975 review, it was consistent with the scope of response requested by your agency and was performed in a manner consistent with project time constraints at the time. However, techniques were available at that time to better identify wildlife habitat losses and the compensation measures necessary to offset those losses. Under current procedures, conditions, and available data, we would review the project more critically and thoroughly if we had the opportunity.

We believe we have adequately addressed all the points you raised. As a point of clarification, our February 5 letter should not be viewed as a review of the SIR or our position on the adequacy of that report in addressing environmental impacts.

Sincerely yours,

James W. Salyer

James W. Salyer
Area Manager

PETITION

As United States citizens, as residents of Sarpy County and as taxpayers, we deplore the expenditure of funds for an unnecessary federal project. The proposed Missouri River Levee Project R616. This levee to be built south of Bellevue, Nebraska will not do those things it is intended to do.

(a) R616 would be useless to protect Offut Air Base runway. Only a flood that no levee would defer, would jeopardize this runway.

(b) The levee supposedly will benefit the Douglas County sewage treatment plant near the Papillion Creek south of Bellevue, Nebraska. The plant was built in conjunction with regulations governing a 100 year flood plan. The levee would be unnecessary.

(c) R616 will not protect the 30 acres of residential buildings located along the banks of the Missouri River, south of Bellevue, Nebraska. The 30 acres would, in fact, be placed between the Missouri River and the levee. Thus, the Area's status would change from flood plain to floodway.

(d) Floods in the area are presently controlled by the Pic-Sloan plan passed by Congress in 1942, along with other improvements made in the last 39 years. Although tributaries entering the Missouri River still need better control. Levee R616 is not the answer.

(e) R616 will destroy the agricultural lands in the area of Elbow Bend and Holubs Place, south of Bellevue, Nebraska. This goes against the Flood Plain Management bill #11988 to prevent development in flood plain area's in order to protect agricultural lands.

Opposition to this project has been voiced by residents of the area since February of 1975. The objections have been voiced to the Papio Natural Resources District and to the Corps of Engineers. These objections were voiced prior to any expenditures by the Papio Natural Resources District.

We again ask that this project not be funded and that it be de-authorized.

Respectfully,

Watershed Associates Rescue, (W-A-R)

Bernice Craven, President
Wesley Taylor, Ex. Director
Sarah Camden, Secretary/Treasurer
Deann Dodson, Director
Robert Bowman, Director
Russell Payne, Director

We respectively request that you consider the 55,027 votes received by Sarah Camden, for election to the Papio Natural Resources District Board, as signatures to the attached petition.

We respectively suggest that these votes were acquired by knowledge by the voters in connection with her association with the Watershed Associates Rescue Association. (W-A-R)

Sarah Camden has been the spokeswoman for the Watershed Associates Rescue for the past two years, plus. Knowledge of her association with W-A-R and what the W-A-R stands for, was a prime contributing factor to her election. It is the one thing that set her apart from her opponent.

Also, it should be noted that Sarah Camden was the only newly elected Director to replace an incumbent on that board.

PETITION

NAME	ADDRESS	CITY/STATE	ZIP
Jenny Camden	408 W 30th Ave	Bellevue, NE	68005
David L. Camden	408 W 30th Ave	Bellevue Nebr	68005
[illegible]	5765 S 166th Ave.	Omaha Ne.	68127
[illegible]	#17 Pheasant Hall	Co. Bluffs Ia	51501
[illegible]	422 West Plains	[illegible]	68028
Nikki Knecht	62 Gingerwoods Rd	Valley, Ne	
Joe Amarite	4805 So 22nd	Omaha, NE	68107
Ken Layendecker	1720 N. 107th St	Omaha, Ne	68114
Edward J [illegible]	7910 [illegible]	Omaha Neb	6812
[illegible]	7910 [illegible]	Omaha Nebr	6812
[illegible]	7910 [illegible]	Omaha Ne	68127
[illegible]	RR#1	GRETNA NEBR	68028
Harlan Stone	1526 So 93rd St	Omaha Nebr	68124
[illegible]	11052 Victory Circle	Papillion Neb	68046
[illegible]	15596 S Valley St.	Omaha Neb	[illegible]
Doug Bowman	8905 Valley View Dr.	LaVista, Nebr.	68128
[illegible]	8025 Valley View Dr	La Vista, Nebr	[illegible]
Diane [illegible]	8010 Valley	Omaha, Nebr	68124
Joe [illegible]	4526 Nebraska Ave	Omaha [illegible]	
[illegible]	[illegible] 37, 37	[illegible]	[illegible]
Curt [illegible]	7702 Parkview Blvd.	La Vista, Nebr.	6812
[illegible]	7707 S 76th Ave	La Vista Ne	68128
[illegible] E Hungerford	7415 FLORENCE ST.	LaVista, NEBR	68157
John [illegible]	[illegible] Terry Dr	La Vista Neb	[illegible]
Mike [illegible]	603 [illegible]	Louisville NB	68037
[illegible]	7332 S. 77th Ave	La Vista Neb.	68128
Karen Krueger	7619 Parkview Blvd	LaVista, Nebr	68128
Howard Harris		Springfield, Nebr	[illegible]
Gary [illegible]		[illegible] Nebr.	
Kay Bowman	8905 Valley View Dr	LaVista Ne	68128
J Krueger	7841 Edward	La Vista Nebr	68128
[illegible]	7663 Suffolk Pl	Ralston, NE.	68114
M Christ	6612 So 73 AVE	RALSTON NE	6812
[illegible]	7413 Josephine Av	LaVista NE	68128
Ronald D. WHITE	8330 WILSON DRIVE	RALSTON NEBR.	68127
Carl Clayton	7609 Terry Drive	La Vista Ne	68128
[illegible] Kloss	7337 So 71st St	La Vista Nebr.	68157
Mary Jackson	7337 So 71st St	La Vista Nebr.	68157
[illegible]	7216 Lillian	La Vista Neb.	68128
Fred Jackson	1403 BEECHWOOD AVE	PAPILLION NEBR	68133
Jim [illegible]	9329 Binney St.	Omaha, Nebraska	68134
[illegible]	328 [illegible] 72	Lavista Nebraska	68128

NAME	ADDRESS	CITY/STATE	ZIP
[illegible]	7311 So 78th	La Vista, Neb.	68128
[illegible]	7611 Newport	Omaha	68122
Tom [illegible]	7[illegible] S. 71 ave	La Vista N.	68128
Marvin J. Bily	7332 So 73rd Ave	La Vista Nebr	68128
Barbara Burroughs	406 S Madison	Papillion Neb	68046
Cliff Dallas	440 North Graham	Papillion Neb	68046
John Long	3123 N. 52nd Ave	Omaha, Neb	6812-
[illegible]	7521 Allison	LaVista Neb	68128
[illegible]	7413 So 85 St	LaVista Nebr	68157
[illegible]	[illegible]	Omaha Neb	68147
Robert McMaren	2902 Hancock #45	Bellevue Nebr	68005
Russell Payne	#2 HOLUB PLACE MO. Rd.	Bellevue Nebr.	68005
Edith M Payne	#2 Holub Pl Mo Rd	Bellevue Ne.	68005
Nancy Keller	4514 Platteview Road	OMAHA NEBR	68133
Jim Cline	702 Royal Ave	Bellevue, Neb.	68005
William W Neill	1235 Farm Pkwy Pl #748	OMAHA NEBR.	68144
Carroll Covert	1227 N. 53rd	Omaha Nebr.	68132
[illegible] Price	6040 Walnut St	Omaha Ne	68106
Robert S. Kennedy.	523 Sixth Avenue	Council Bluffs, Iowa	51501
John Covert	1227 N 53 ST	Omaha Nebr	68132
[illegible]	4803 PIERCE St.	OMAHA, NEBR.	68124
[illegible]	2702 Edwards St.	Bellevue, Ne.	68005
Mark Carter	7115 RR Ave.	Omaha Nebr	68107
Tom Kosiske	4851 Robin Drive	Omaha, Ne.	68157
Rosemarie Kosiske	4851 Robin Dr	Omaha, Ne.	68157
Diane Raymond	Box 46 Missouri River Rd	Bellevue	6800
[illegible]	#28 Holubs Pl.	Bellevue	68005
Charles J. Roll	#4 HOLUB PL MO RIV RD, BELLEVUE NE	BELLEVUE, NE	68005
Gladys Roll	#4 Holubs Pl. Mo. Rd. Bellevue, Nebr.	Bellevue Nebr.	68005
William O Broderick	#24 Holub Place Mo Rd Bellevue Ne	#24 Holub Place	68005
Marguerite M. [illegible]	212 E 22nd Bellevue	Nebr.	68005
R. L. Broderick	Lot 24 Holubs Place	Nebraska	68005
[illegible] Dawson	Lot 14-15 Holub Place	Bellevue Neb	68005
Billie Dawson	Lot 14-15 Holub Place	Bellevue Nebr	68005
Bob Ripley	Lot 60-61 " "	OMAHA Nebr	
Dean W. Fentz	1214 Mayfair DRIVE	Carter Lake Iowa	51510
Elizabeth Ripley	506 Cedar	Omaha Neb.	68104
Frances Fentz	1214 Mayfair Dr	Carter Lake	5151
M Siderewicz	#9 Missouri Rd	Bellevue	68005
Mary T Siderewicz	608 So 38th St	Omaha, Nebr.	68105
[illegible] Siderewicz	4215 Hillsdale Ave	Omaha	6810
Whitey Schiller	Box 1 McKinney Road	Bellevue	68005
Shirley Nemec	9718 Kensington Circle	Omaha.	68123
Esther Schiller	2851 Kones Dr	Bellevue	68005

NAME	ADDRESS	CITY/STATE	ZIP
[illegible]	#-6 Holub Place	Bellevue Nebr	68005
Cliff Raymond	Box 46 Holub's place	Bellevue Nebr	68005
LaVaune Curtis	14 Holubs Place	Bellevue Nebr	68005
Rosine Wyatt	104 Missouri Riv Rd.	Bellevue Ne	68005
Barbara M Smith	27 Holub Pl Mo Rd	Bellevue, Ne	68005
[illegible] Smith	27 Holubs Pl Mo Rd	Bellevue Nebr.	68005
Robert [illegible]	Box 11 Missouri River Rd	Bellevue Ne	68005
Jack M Clark	Box 23 Holub's Place	Bellevue Neb.	68005
Michele A. Clark	Box 23 Mo River Rd	Bellevue	68005
B[illegible] Driesner	Box 12 MO. Rv Rd	Bellevue	68005
Helene Driesner	Box 12 Mo Rv. Rd	Bellevue	68005
Don Jensen	Box 59 Mo Rv Rd	Bellevue	68005
Dale Wise	LOT 50-51-HOLUB'S PL	BELLEVUE	6800
[illegible]	5806 So 17 St.	Omaha Nebr	68107
Della Meyer	Box #44 Mo River Rd	Bellevue Nebr	68005
Don Bates	Box 513 Bellevue Nebr	Bellevue Nebr	68005
Patricia [illegible]	914 [illegible]	[illegible] Ne	68028
Robert E. Dorsch	4506 Primrose Lane	Omaha, Nebr	68157
Rex M Bresley	411 West 24th	Bellevue Ne	68005
[illegible] Bresley	411 W. 24	Bellevue, Ne	68005
Guy [illegible]	675 E. Armour Blvd	KCMO	6410
[illegible] D. Swift	323 So. 51st Ave	OMAHA, NEBR.	68132
Paul [illegible]	9305 FRANKLIN	OMAHA NEB	6814
[illegible] Paskach	Box #7 Holub's Pl	Bellevue NE	68005
Rose Paskach	1315 Washington Str	Omaha, Nebr	6810
George Paskach	1315 Washington Str	Omaha, Nebr	6810
Robert R. Bowman	7403 So 72nd Ave	La Vista Nebr	68128
Judi Bowman	7403 So. 72 Ave.	La Vista, Nebr	68128
Ruth A. Davis	7339 So 72nd Ave.	La Vista, Nebr.	68128
[illegible] M. Davis	7339 So 72nd AVE	LAVISTA, NE	68128
Melvin R Davis	1005 W 29 Ave	Bellevue, Nebr	68005
Robert [illegible]	7221 Frederick ave	LaVista Neb	68128
Joyce Torgerson	12721 ATWOOD AVE	OMAHA, Ne.	68144
Ben Jacobson	Rt 1 S	Springfield Nebr	68059
Rose [illegible] Jones	6624 Emmet St	Omaha Nebr	68104
Marylynn Hart	8123 Valley Rd	LaVista NE	68128
[illegible] Horton	1492 Polk St	Omaha, NE	68137
Daniel E. Davis	7339 So. 72 Ave	La Vista, Nebr.	68128
Jeff Bowman	7403 So. 72 Ave	La Vista	68128
Lori Huse	7413 Joseph Ave	La Vista	68128
Brian Fritcher	7658 V Plz #5	omaha	68127
Jill Bowman	7403 So. 72nd ave	LaVista	68128
Connie Painter	2407 Crawford	Bellevue, Ne	68005
William [illegible]	Box 43 Holub Place	Bellevue Nebr	68005

NAME	ADDRESS	CITY/STATE	ZIP
Jacquie Kilgore	2524 Hancock	Bellevue Ne	68005
[illegible]	Box 43 Holub place	Bellevue Ne.	68005
Chester W Brunsman	Box 15 Holubs	Bellevue Ne	68005
Margaret Burkdoll	Box 22, Holubs Place	Bellevue Ne	68005
Charles Holda	Box 5 Holubs Place	Bellevue Ne	68005
Esther E Foy	Rt - 3 Box 150	Omaha Ne	6812
Orville Foy	RT - 3 Box 150	Omaha Neb.	68123
C Knoblauch	R.R. 73 Box 171	Omaha, Nebr	68123
Don Knoblauch	R.R 73 Box 171	Omaha, Ne	68123
Tim Daut	Rt 73	Omaha Ne	6812
Harold F Ritter	RR 73	Omaha Neb	68123
Thomas Brown	701 West 24 Av.	Bellevue Nebr.	68005
[illegible]	10 MISSOUR ROAD.	BELLEVUE NEBR	68005
Wenceslaus Vana	#150, Holubs	Bellevue NE	68005
Katherine M Vana	#150 Holubs	Bellevue Nebr.	68005
Sarah Camden	62 Elbow Bend	Bellevue Ne.	68005
Carl Bayles	1510 HANCOCK ST	BELLEVUE NE	68005
Cynthia Chrane	8524 GRANVILLE Pky #520	LaVISTA NE	68128
John a Jay	1205 Bellaire Blvd	Bellevue NE	68005
Mary I. Liotta	1803 Madison St.	Bellevue, Ne.	68005
Bob Brooke	2119 Arbor	Bellevue, Ne.	68105
Vernice L Fiala	2304 Lincoln Rd 1	Bellevue Ne	68108
Dean M McCracken	2309 Franklin St	Bellevue, Ne	68005
Elvira Wilson	1108 IRONWOOD CRT	BELLEVUE, NE	68005
Sue Anderson	Rt 73 Box 10	Omaha Ne	68123
Richard Scofield	2610 Madison	Bellevue, NE	68005
Charles Ritchie	2707 Franklin	Bellevue Ne	68005
Joan A. Bragg	#12 Fleetwood Lane Grandview Mob. Home ct	Bellevue, Neb.	68005
Cindy Holdenfield	2810 [illegible]	Omaha Nebr. 68147	68147
Linda Corcoran	602 N. 22nd Avenue	Bellevue, NE	68005
[illegible] C Egr	Rt #1 Box K9AA	[illegible]	68014
Shirley Alt	2012 VAN BUREN	Bellevue Neb.	68005
Jim Holthusen	2404 Hancock	Bellevue Neb	68006
[illegible]	1102 [illegible]	[illegible]	[illegible]
Mike Ford	4603 N 80 AVE	Omaha Nebr	68134
Oscar Gamble	3324 N 16 st	Omaha Nebr	68110
Curt Olsen	70 Elbow Bend Rd	Bellevue Nebraska	68005
Iphigenia B Olsen	70 Elbow Bend Rd	Bellevue Nebraska	68005
Gary Olsen	70 ELBOW BEND RD	BELLEVUE NEB	68005

SUBCOMMITTEE RECESS

Mr. Crow. If there are no other comments, the committee stands in recess until 1:30 p.m. this afternoon in this room.

[Whereupon, at 12 noon, the subcommittee was recessed, to reconvene at 1:30 p.m. this same day.]

(Afternoon Session, 1:40 p.m., Tuesday, March 31, 1981)

NONDEPARTMENTAL WITNESSES

HEARING PROCEDURE

Senator Sasser [presiding]. The subcommittee will come to order.

In the absence of the chairman, Senator Hatfield, I have been asked as a member of the subcommittee to preside over today's session.

Senator Hatfield expresses his regrets that he can't be here this afternoon.

We have a large number of witnesses that wish to be heard and, of course, we wish to hear them.

Therefore, in accordance with our notification to each of the witnesses, it will take some self-restraint on the part of everyone to hold their oral testimony to a minimum in order that all of you who requested an opportunity to testify may be fully heard.

So in keeping with the subcommittee's wishes, I ask that the detailed prepared statements that each of you has worked out very carefully be submitted for the record, where they will be carefully reviewed. That is the record the subcommittee will study in determining its judgments and recommendations in the upcoming year. Also, this way we will have a carefully detailed record so that anyone who is not present will be able to arrive at an independent judgment.

Then if each witness will summarize or highlight the important points in his or her oral testimony, it would be most helpful.

Columbia Dam, Tenn.

STATEMENT OF HON. JIM SASSER, U.S. SENATOR FROM TENNESSEE

We will proceed now to call our first witnesses, who are Mr. Claybourne Ross, the executive secretary of the Upper Duck River Development Agency and Association; Judge Taylor Rayburn, Columbia, Tenn., the county judge, Murray County; Edwin Allen, the chairman of the Upper Duck River Agency from Lewisburg, Tenn., and Mayor Buddy Morgan, the mayor of the city of Columbia.

Gentlemen, I want to welcome all of you here today, representing those in favor of the Columbia Dam project of the Tennessee Valley Authority.

Let me say that this committee, as you all know, and the Senate as a whole, has always supported the Columbia Dam project. The project is now approximately 40 percent complete.

Like many water resource development projects, it has had some pretty heavy sailing here the last 2 or 3 years, but in my mind most of the objections have now been worked out. The Tennessee Valley

Authority is cooperating with the Department of the Interior on the question of endangered species.

I believe the consultation process on that issue has been a successful one.

Finally, the Corps of Engineers announced last year its intention to issue a 404 permit if the Tennessee Water Quality Control Board upheld its certification of the project.

Well, on March 13, the Tennessee board again upheld its previous certification. Now, I hope this clears the way for the Corps to issue the 404 permit just as soon as possible. Before hearings of this subcommittee just a couple of weeks ago, when the Tennessee Valley Authority board was up here testifying on their budget, I urged Chairman Freeman and Director Freeman and Director Clement to begin working with the Corps just as quickly as possible to get the permit issued as soon as possible.

Well, gentlemen, the previous administration, as you also know, deferred $15.8 million which had been appropriated specifically for this project construction. Now, the present administration has continued this deferral pending approval of the 404 permit process.

The day the State recertified the project, that very day I wrote Budget Director David Stockman and asked him and urged him to immediately withdraw the deferral of these funds, since the project was now certified. I have not heard from Mr. Stockman yet and I am hopeful that these funds can be released and that construction can begin just as soon as possible.

I think we all know that the longer this project is delayed, or any project for that matter, that the ultimate cost is going to increase. So I strongly support restarting construction and finishing this project just as soon as possible.

I want to welcome you, Mr. Claybourne Ross, and my good friend Judge Taylor Rayburn, the distinguished mayor and my friend Buddy Morgan from Columbia, Mr. Edwin Allen, also a good friend from Lewisburg, Tenn. Let me say that we look forward to hearing your testimony and comments today regarding the Columbia Dam, this very important water project to our area of the country.

Mr. Ross, would you want to proceed first or how do you want to divide that up.

STATEMENT OF CLAYBOURNE ROSS, EXECUTIVE SECRETARY, UPPER DUCK RIVER DEVELOPMENT AGENCY AND ASSOCIATION

ACCOMPANIED BY:

JUDGE TAYLOR RAYBURN, COLUMBIA, TENN.

EDWIN ALLEN, CHAIRMAN, UPPER DUCK RIVER AGENCY, LEWISBURG, TENN.

MAYOR J. A. BUDDY MORGAN, COLUMBIA, TENN.

Mr. Ross. Yes.

Mr. Chairman, I am Claybourne Ross, I am the executive secretary of the Upper Duck River Development Association and Agency. I bring to you the greetings of the 130,000 people in the four-county area in the

Duck River watershed. We are most appreciative of the interest and the helpfulness of your committee and the Congress in their support of this project.

The Duck River project consists of Normandy and Columbia Dams, and this was essential to bring about a controlled water control system of this particular stream.

As you know, in past years delegations of our citizens have come to this meeting before your committee to demonstrate their support for this particular project.

In addition to this, we have also enjoyed the support of the local governmental agencies, the Tennessee General Assembly, the Governor of the State of Tennessee, our 10 U.S. Senators, and our Representatives, Congressman Byrd and Congressman Gore, and other members of the Tennessee delegation.

This project was submitted to the Congress in 1968 and appropriations were made for fiscal 1969. In 1970, OMB insisted that the Federal Water Reclamation Act be applied to TVA projects.

As a result, a contract between TVA, the Upper Duck River Development Agency, and five water systems in the watershed entered into a contract and this contract was consummated in 1971. It was a contract for $16.2 million to be paid by the local people as their contributions to the construction of this particular project.

It was set up for 5 cents per 1,000 gallons of water that was used by the people of the valley. This was to be paid into a trust fund and the first payment to be made to TVA and the U.S. Government in 1986.

At the present time, that trust fund is at $2.7 million. We anticipate no problem in connection with neeting our obligation of the initial payment.

Mr. Chairman, you have so clearly covered this matter of the 404 permit that I will pass over that particular part. We have gone through the process of hearings before the Tennessee Water Quality Control Board and, as you stated, that was consummated on March 13, 1981, with the approval of the 401 certification by the Tennessee Water Quality Control Board for the Duck River project, the Columbia Dam.

We expect that the 404 permit will be submitted soon.

One of the most important things that has happened is the drought situation and how it has affected this project and the communities. As you know, at the present time much of the country is experiencing a water shortage and it has reached crisis proportions. The 130,000 people that this area serves, this river serves, are affected.

Normandy Reservoir, completed in 1976, has really been a God-send to this valley. As of May 16, 1980, the elevation of the water in Normandy Reservoir was 876 feet.

The elevation as of yesterday is at 858. This is 18 feet below normal.

What has been happening is that water from this reservoir has been drawn down continuously since last June in order to supply the communities in this valley with water. Thus far they have had an adequate supply.

Many of our neighbors this past summer and fall experienced very critical conditions for water supply, even some industries had to be closed because of the lack of water. I would like for the record to show that as of yesterday the Normandy Reservoir is 21,000 acre-feet below normal for this particular time of the year.

Normally, the lake is filled, going to fill in mid-January and by May 15 it is back to normal. This has been the history of it.

However, because of the severe drought situation and the demands upon this reservoir and Duck River for water supply, it has become very critical.

Now, with reference to our rainfall. From June until March of this year, June 1980 until March of this year, we should have had 44.7 inches of rainfall. We actually experienced only 24.2 inches of rainfall. So you see we are far behind in normal rainfall at this particular time. So this water project is most important and the development of this valley is dependent upon water.

It is our No. 1 resource and, therefore, the Columbia Dam, the completion of it, is most important.

As far as our requests of this committee are concerned, we request continual funding. TVA in 1982 has the capacity to utilize in excess of $24 million. The deferral of these funds that can be expended in 1981, we hope, will be released as the Senator indicated as soon as the 404 permit is issued.

We are aware of the present budget constraints, however, we request the Congress to continue the funding of the Duck River project, the Columbia Dam, in amount which in its opinion is reasonable.

Columbia Dam, the whole of Duck River project, is worthwhile and in the public interest.

We will be glad to answer any questions, or the other gentlemen here might have some comments or questions.

[The statement follows:]

STATEMENT OF CLAYBOURNE ROSS, EXECUTIVE SECRETARY, UPPER DUCK RIVER DEVELOPMENT AGENCY AND ASSOCIATION

My name is Claybourne Ross. I am the Executive Secretary of the Upper Duck River Development Agency and Association. I have served in this capacity since 1964. I speak for the Agency and Association. The Agency is an official State Agency created to further this project. The Association is a citizen's organization representing some 130,000 people of Bedford, Coffee, Marshall and Maury Counties of Tennessee through which counties the Duck River flows on its way to the Tennessee River.

You will recall that two years ago 382 citizens from the four county area came to Washington at their own expense to demonstrate their support for the Duck River Project (Columbia Dam). The people are solidly behind this project. But in the interest of conservation of energy and expense, they remained at home but asked that we convey their greetings and support.

We appreciate the interest and helpfulness of this Committee and the Congress in support of the TVA Program, and the Duck River Project (Columbia and Normandy Dams and Reservoirs, Planning Report No. 65-100-1). This Federal Project has met with the enthusiastic approval of the great majority of the people of the area affected. On behalf of these people, we thank you.

This is the people's project. It is a very necessary one, and is the key to the development of this area since it will provide flood control, improved water quality, expand recreational facilities, afford a very necessary water supply, increase and enhance job opportunities in the area. The Normandy Dam portion of the Duck River Project was completed in 1976. The Columbia Dam was started in 1973 and is now approximately 40% complete with the concrete work and flood gates on the dam finished.

There is very little local opposition to the Duck River Project, and it always has had the wholehearted support of local governmental agencies, Tennessee General Assembly, the Conservation Commissioner, the Governor of the State of Tennessee, Senators Sasser and Baker, Congressman Beard and Gore, and we feel all of the Tennessee Delegation. We are also pleased to have the continued support of the Honorable Joe L. Evins, a distinguished former member of Congress, a friend of this project and one of Tennessee's most respected public servants who is well known to your Committee.

HISTORY

The TVA Act passed by the Congress in 1933 authorized projects such as the Duck River Project including the Columbia and Normandy Dams. Although subsequent funding is necessary, no further authorization was necessary for TVA to build these Dams. The original planning report was submitted to the Congress in 1968. It was approved by the Congress and appropriations were made for fiscal '69. Shortly after the approval of this project, the Office of Management and Budget insisted that the Federal Water Reclamation Act Provisions as used on Western projects be applied to TVA projects. This resulted in negotiations of a contract between the Upper Duck River Development Agency, TVA, and the five cities of the area that have water filtration plants. This contract was finally executed in 1971. The contract obligated the Agency and water systems to repay to TVA and the government $16.2 million as local contribution for water supply. To accomplish this, the users of the water in the five water systems were charged 5¢ per 1,000 gallons of water used and these funds to be paid monthly into a trust fund for repayment of the $16.2 million. Payments began in January of 1972. Under the contract between the Agency, TVA and the five cities, $2,700,000.00 has already been paid into the trust fund.

The people for whom I speak live in the area, and we know the environment as it is and will be. The project is environmentally sound and will improve the human environment by improving water quality, making available an adequate and pure water supply providing much needed flood control for the area (as well as aiding flood control in the Tennessee and Mississippi Rivers) and improving recreation. TVA has environmental expertise, and all of its directors have actively sponsored the project. However, several Environmental Organizations with membership outside the area claiming superior knowledge have used environmental laws passed and regulations adopted since the original approval of the Upper Duck River Project (Planning Report No. 65-100-1) such as NEPA, the Endangered Species Act, the Federal Water Quality Control Act, and the requirements of a Corps of Engineers 404 Permit be obtained, in an attempt to stop or delay this project. It is our view, which we feel we must call to your attention, that these efforts have gone beyond reason and amount to undue harrassment by persons who want this area to be their wilderness. We have experienced the problem that the opponents of the dam by contacting minor officials and agencies have been able to get these officials to delay actions on permits. These permit delays have been very expensive and have increased the cost of the dam substantially, for which persons causing these delays bear a great responsibility.

Under the NEPA process the courts have found that TVA complied in 1974. Thereafter, under the Endangered Species Act, opponents of the project succeeded in getting several mussel species listed. However, a great majority of these species were found not to have been in the Columbia Dam Reservoir for many years. Asiatic clams have, for all practical purposes, destroyed the mussels in the reservoir area; and only a very few of one species exists, and these exist only because they are located and protected by a small dam. The species listed also exist in other rivers. There have been numerous consultations with TVA and the Department of the Interior, and it now appears that an agreement has been reached for the preservation of the species that is still in the reservoir.

In October of 1977 TVA submitted an application to the Corps of Engineers to dredge and fill under the newly applied requirements of Section 404 of the Clean Water Act. The Corps of Engineers has held hearings. The State of Tennessee has issued Water Quality Certifications. On January 22, 1980, EPA Region IV Director of Enforcement wrote to the Corps of Engineers and stated that EPA would not object to the issuance of the 404 Permit, so long as the mussel conservation program agreed on was implemented. Later, however, a new Administrator for Region IV, EPA, raised an objection that from a policy standpoint, that she thought more stringent water standards should be applied to the reservoir even though this was contrary to present regulations.

Such confusing action and delays have confused the public and caused citizens to believe that there is a hopeless tangle in government regulations. The citizens do not understand why this project that has been approved and on which there have been so many hearings should be subjected to such unreasonable delays. We and TVA are working diligently to unravel this tangle, and we feel we are on the verge of success. I am sure that it was never Congress's intention that programs it had approved should be delayed and made more costly by such harrassment.

The drought situation which prevails throughout most of the country emphasizes the need for water projects such as the Duck River Project (Columbia Dam). The Duck River area is no exception. In 1980 we had a deficiency of 12 inches of rainfall. In the first three months of 1981 we are experiencing a shortage of 6.69 inches of rainfall. In order to meet the water needs of the 130,000 people in the Upper Duck River Watershed, it is imperative that the Columbia Dam be completed at the earliest possible date.

The 401 Certification as issued in December 1979 by the Tennessee Commissioner of Public Health was challenged by the EDF. The EDF petitioned the Tennessee Water Quality Control Board to hear their appeal of the 401 Certification. This action brought about a series of hearings and a delay of approximately 15 months. These hearings were completed on March 13, 1981 and the Tennessee Water Quality Control Board approved the 401 Certification on the Columbia Dam. The 401 Certification is a prerequisite of the issuance of a 404 Permit by the Army Corps of Engineers. The 404 Permit is expected to be issued in the next few days.

REQUESTS

Because of the above mentioned delays, more than $18,000,000 of the appropriation previously approved by Congress has been deferred. We are advised that TVA's construction capacity could use these funds in 1981, and TVA's 1982 capacity would be in excess of $20,000,000. We are further advised that the project could be completed in three working seasons if the funds are available. We feel that rapid completion of this much needed project makes economic sense.

We understand the present budget constraints and the necessity to cut the budget. We do feel, however, and request, that this Congress continue funding this project in an amount which in its opinion is reasonable. We further request that the Columbia Dam and Reservoir be made a special item as was done last year. It may be that if harrassment of the project, which has occurred, continues, that we will be required to ask an exemption such as has been granted in Tellico. At the moment, however, this does not seem necessary.

The Columbia Dam and Reservoir, and the whole Upper Duck River Project is worthwhile. Its completion is vital to the area it will serve, and the State and the country. Local communities, landowners, local governments, and local citizens have made substantial commitments and plans based on the fact that the project would be completed as Congress has authorized and funded it since its inception. We urge that the project be funded and completed as rapidly as practical, and that good faith be kept with the people of the area.

Senator SASSER. Do any of the others have anything to say about this vital project?

We would be delighted to hear you this afternoon. Judge Rayburn, I have never seen you without something to say.

Judge RAYBURN. A few words. Mr. Chairman and my good friend, Senator Sasser, all the Senate aides, I would like to take just a little bit, about 2 minutes of your time and state the situation as I see it.

I want first of all to say that Senator Hatfield, who is the chairman of the Appropriations Committee, a year or two ago we met and Senator Hatfield presided as you are today, and we had some 350 people there. Senator Hatfield called this the most wonderful project that had come before him since he had been in the U.S. Senate due to the fact that we were spending $16.2 million of our own money.

I will say that Senator Baker has assured me, that is his people have assured me, today, that he is in full support. I will say that we have the Speaker of the House of Representatives, and we have the chairman of the Rules Committee, and we have Mr. James Whitten, who is the chairman of the Appropriations Committee in the House, all are our friends, Tom Bevill is our friend, and with these kinds of people we feel like we are in pretty good shape with the Columbia Dam.

So we leave it to your good judgment and we are sure that you and Senator Baker can look after our interests. Thank you very kindly.

Senator SASSER. Thank you, Judge Rayburn.

Mr. ALLEN. Mr. Sasser, I would like to say that we had breakfast with Mr. David Freeman yesterday morning and he assured us if funds were made available that he felt that the construction of this dam could be completed possibly in 2 years, two working seasons, and we in our area as you know, as you have been through it several times, it is just a vital thing for us that we get some water because our towns are going to dry up.

As you know, I operate a dairy, and last summer if there hadn't been an aid to each water line by my farm I would have been in trouble. The people in the area, if water is not made available it is just going to be a sad situation. And if there is any way funds can be available, we need them. Thank you.

Senator SASSER. Thank you, Ed.

Mayor, do you wish to add anything to this?

Mr. MORGAN. Senator, I would like to thank you for letting us appear here today and tell you how much we need this dam for our water supply.

We will be furnishing Williamson County and other areas in the Duck River area, and if it hadn't been for Normandy Dam this year we would have been in trouble with the drinking water for our cities. Thank you.

Senator SASSER. Well, gentlemen, I thank you, and let me say that I agree with you wholeheartedly. I think the drought that we experienced this past year, not just in Tennessee, but almost all over the Southern United States, indicates that water projects such as we are discussing here are even more vital. And, of course, you have only to fly across middle Tennessee to see the low reservoirs everywhere.

In fact, some of them are actually empty in some counties such as Dixon County where I was taken to a site by the county executive there when they were drilling wells to try to find water to supply the needs of that county this summer.

So, it is a well-known fact that we have a problem with water supply in middle Tennessee and this project, I think, becomes increasingly vital to that area as we grow, as industry comes in, as population expands, and I want to assure you that I am willing to continue as a member of this subcommittee, as one member to enthusiastically and wholeheartedly support this project.

Now, I want to make the point also that funds that have been previously appropriated for TVA have been specifically, specifically designated to go to this Columbia Dam project. There may be some disagreement about that on the part of some TVA officials, but there is no disagreement in the minds of the members of this committee as to what should be done with the funds that were appropriated for the Columbia Dam.

PREPARED STATEMENT OF SENATOR BAKER

I am delighted to insert in the record now a statement from my distinguished Senator colleague, Senator Howard Baker, supporting this project, and also incorporate in the record, without objection, a letter from Judge Taylor Rayburn directed to Senator Mark Hatfield, chairman of the full Appropriations Committee.

Gentlemen, I thank you very much for appearing here and if you are going to be in Washington a while this afternoon, stop by my office, I would like to talk to you.

[The statements follow:]

STATEMENT OF HON. HOWARD H. BAKER, JR., U.S. SENATOR FROM TENNESSEE

I appreciate this opportunity to provide a statement in support of funding for completion of the Upper Duck River project which is now approximately 85 percent complete. This project is a major water project under construction by TVA which consists of the Columbia Dam and Reservoir, along with the completed Normandy Dam and Reservoir.

I have long supported this project which has been subject to long delays and dispute. The State of Tennessee Water Quality Control Board has recently issued the water quality certification for this project. Pending approval by the Army Corps of Engineers and EPA, work on the project can get underway again. I am glad that the dispute is over and we can get back to work on this project, following the guidelines and regulations applicable to such projects.

The Upper Duck River project will enhance the development of middle Tennessee through the economic and water supply benefits which will result. The drought conditions experienced in this region last year and continuing this year heighten the need for this project.

From the early 1960's many persons in the area have worked hard to develop the Upper Duck River project. I am gratified that their hard work has paid off and the project can now be completed.

I want to express my appreciation to this committee for the interest and helpfulness exhibited in support of the TVA program generally and the Upper Duck River project specifically. I want to urge that funds for the project be appropriated so that we can move toward completion.

LETTER FROM TAYLOR RAYBURN, COUNTY JUDGE, MAURY COUNTY, COLUMBIA, TENN.

MARCH 24, 1981.

Hon. MARK HATFIELD,
Chairman, Appropriations Committee, U.S. Senate,
Washington, D.C.

DEAR SENATOR HATFIELD: As a longtime friend of the Columbia Dam project, which is vital both to our present and our future, I am asking for your continued support of the dam which will be included in the supplemental appropriations bill which is coming before Congress, as I understand it, about the middle of April. This project, which includes Normandy Dam and Columbia Dam as one project, is some 85 percent complete. I am sure that you already understand that we here in the five-county area are paying $16.2 million as we agreed to when the dam was conceived. (I remember several years ago when you presided over a meeting to hear our story of the dam, you commented that you had been in the Congress for many years and this was the first dam where people were participating in the payment for it. I'm sure you remember that we had some 350 people in that committee room, everyone of whom came home imbued with a great respect and friendship for your warm and helpful attitude and words.)

I thank you for everything you have done in the past and for your continued support.

Sincerely, your friend,

TAYLOR RAYBURN, *County Judge.*

TEXAS WATER RESOURCE DEVELOPMENT PROJECTS

STATEMENT OF HON. LLOYD BENTSEN, U.S. SENATOR FROM TEXAS

Senator SASSER. I want to welcome the distinguished Senator from Texas today to our subcommittee hearings. We are also delighted to have you appear here and to hear your views on any subject I might say Senator. Your views are always convincing to this committee and I find that I always find the strength of your logic almost irresistible.

Senator BENTSEN. Thank you, Mr. Chairman.

Let me say, Mr. Chairman, I know of few Senators who have shown such great interest or the effectiveness in getting work done on water projects. Knowing how well Tennessee is represented by you, I will be talking about Texas. [Laughter.]

I am looking out at this group and I see many friends from the Trinity River Authority, the Brazos River Authority, the Brazos River Harbor Navigation District, the Intracoastal Canal, the Corpus Christi ship channel, and many others.

I will talk about water projects in Texas and these are the people who understand, understand how important they are, not just to Texas, but to this Nation of ours.

And I would like to say that as much as the Corps of Engineers, or you, or I, these people will have as much to do with the fulfillment and completion of those projects as anyone else because they know it on the ground. We need their input.

I am delighted that you are here to listen to their testimony today.

I saw an article on the cover of Newsweek the other day about the coming crisis in water. I truly believe it. I think the day will come, and not too long, when the water crisis in this country will be just as serious as any energy crisis that we are facing. Yet, perceiving the situation where we have to cut back the budget—and I support the President on budget control—there is a tendency to say, "Let's put off the capital projects; let's not spend that money because we don't have the courage to take care of some of the day-to-day expenses that have to be cut back." Really, we are shortchanging this country and its future if we don't make the kind of investments that we have to make in water projects and navigation projects.

If we adopted the President's budget request for the Corps of Engineers construction projects without one dollar's change, we would be talking about having the capital spending funds at 48 percent of what it was in 1967, in real dollars.

So, although I support the President's overall budget, and I support totally the amount of money put into this budget for expenditures, I think for some exceptions we are going to have to have some increases.

And I know of no more eloquent use of that than my distinguished colleague Congressman Brooks, who has long evidenced his interest in water projects in his district and, in turn, he helped us on State projects.

Mr. Chairman, I have a very eloquent statement prepared that I would like to include in the record. But you have now heard what I believe. I was born and reared on the Rio Grande. I was born and reared in an area where we depended very much on the waters of the Rio Grande and where they had great water shortages in trying to take care of the farmlands and municipalities.

But, fortunately, because of the foresight of a young Congressman many years ago, those problems were resolved, and modesty prevents me from naming him.

Mr. Chairman, I thank you for having this distinguished group of Texans here and I am very appreciative for their support to these projects.

[The statement follows:]

STATEMENT OF SENATOR BENTSEN

Mr. Chairman, we are approaching a water crisis in this country. It may not come for twenty years. It may not come for thirty years. But it will come and hit hard unless we react to it now. It has reached the point where national news magazines have featured it as a cover story. This country stands with respect to water where it did twenty years ago with respect to energy. We failed to act to respond to the impending energy crisis then; we cannot fail to act on the impending water crisis now. It will be a difficult task. Over the past several years, we have seen our new investments in water resources erode in real terms as inflation took its toll. If the Congress adopts the budget request with no changes, it will approve a water project construction budget for the Corps of Engineers that is 48% of the fiscal year 1967 construction budget in real terms. This year we are again contending with the compelling need to control federal spending -- a need that I fully support. In looking for cuts in federal spending, there are those who find it easier in many cases to trim capital programs with longer term benefits than it is to reduce direct spending programs. We must avoid demeaning capital programs. A sound water resource project is an investment in the nations future -- a future that we have the responsibility to protect. To confront the coming water crisis, to build the navigation facilities necessary to keep this country competitive, we cannot back away from sound water projects with the hollow excuse that it can be done next year or the year after or two years from now when budgetary problems are less compelling. We must continue to pursue a sound far-sighted program. We owe the nation nothing less.

With this preface I would like to now comment on water projects in the State of Texas. Let me state at the outset that I strongly support the funding levels recommended in the President's fiscal 82 budget request for each of the Texas water projects. However, I want to specifically note certain projects.

Under "advanced engineering and design/construction" there are several projects I want to highlight. First, Millican Lake on the Brazos River represents an urgently needed facility to meet present as well as future water demands. Essentially all of the long-term water supply yields of all the lakes in the Brazos River Authorities basin-wide water supply system is committed. Millican lake offers the only feasible source of additional water supplies necessary to meet present and future water needs. The budget request of $290,000 dollars is the full capability; it is clearly justified.

Second, the Cooper Lake Project is supplying necessary water to much of Northeast Texas. It has been delayed by litigation. The Environmental Impact Statement has now been revised and this project should begin moving again. The budget request includes $650,000 for Cooper Lake. These funds are necessary and should be included in the final appropriations bill. Cooper Lake was authorized in the 1950's; water needs in this area will be compelling in the mid-1980's. This project should nct be delayed any longer than is absolutely necessary.

Third, the Colorado River and Tributaries, Boggy Creek at Austin, Project is awaiting construction authorization. However, additional effort can be spent on this project in advancing the engineering and design effort. The Corps indicates a capability of $300,000 for these efforts. I join with Congressman J.J. Pickle in recommending funding for further efforts. The project is necessary to control flooding on the Boggy Creek as it flows through poorer neighborhoods of the city. However, it contains a sound benefit to cost ratio of 1.3.

Fourth, the project to deepen the Freeport, Texas, Harbor deserves consideration by this committee. Last year, the Congress acted to allow the Corps of Engineers to receive up to $10 million in funds submitted by local sponsors of this project. It continues to be one of the best projects to be presented to the committee with the benefit to cost ratio well above 6 to 1. Even though the Corps is allowed to receive funds to begin construction on this project, the Corps is reluctant to move forward without continued indication from the Congress that is supports the project and will ultimately fund it. I would urge the committee to closely examine the testimony of the Brazos River Harbor Navigation District and to consider the inclusion of some funding for this project in the fiscal 82 Appropriations Bill.

Under "operation and maintenance", it is critically important to allocate these funds where they are most cost effectively spent.

Turning from the Corps of Engineers projects, I want to address the Water and Power Resources effort. I continue to support adequate funding for the Bon Wier project, the Big Cow Creek project, the Nueces River(Choke Canyon) project, the Delta Lake Irrigation District(Loan Program), the Hidalgo County Water Improvement--Districts 1,2,&5(Loan Program), and the HIPLEX program to promote rainfall on the water limited areas of the Southwest and Midwest.

STATEMENT OF HON. JACK BROOKS, U.S. REPRESENTATIVE FROM TEXAS

Senator SASSER. Thank you very much, Senator Bentsen.

I might say, as always your statements are very persuasive and you have indicated to myself and others the vital importance of water to this particular area of Texas.

The committee is delighted to welcome today the very distinguished and able chairman of the House Government Affairs Committee, my good friend Congressman Jack Brooks.

Mr. Chairman, we welcome you today and look forward to any statements that you might wish to make in support of this project.

Mr. BROOKS. Thank you very much, Mr. Chairman. Jim Sasser, if you all don't know it, is one of the distinguished Members of the Senate from Tennessee. He happens to be, as we are, a dedicated Democrat.

I want to thank you for the opportunity to appear and I am going to run through this very briefly and take about 4 minutes, and say that I am honored to be here in support of Senator Lloyd Bentsen's efforts in behalf of the Ninth Congressional District. He has always been a stout supporter of those projects; he understands water projects. He did, when he was 27 years old, and that was 4 or 5 years ago. That is when he first came to Congress. That is that young Congressman who made those great improvements down there in the valley. He later turned into being an old Senator. But he still understands thoroughly the problem.

In brief, I support all the projects. We need two of those that are not in the budget. That is Pleasure Island in Port Arthur, and we need another $2.1 million for Taylors Bayou. And we are interested in your understanding our development in Galveston.

We are well underway, we have a permit from the Corps of Engineers. We are underway to develop a great coal export facility, a new grain operation, and a tremendous liquid cargo facility.

We are not asking for any money for that now but certainly we will need some in the future.

WALLISVILLE LAKE, TEX.

On the Wallisville project, we hope to have the environmental impact statement in by May and we will be back next year for money on that, Senators. That is not a big project but it is one that was stopped by an environmental impact statement in a lawsuit and it was 95 percent completed, an earthen dam, and by the time they resolved it the urban dam has been deteriorated to such an extent we probably wasted $10 million on that lawsuit.

INTRODUCTION OF WITNESSES

I have with me a number of people and I would like to introduce them. They are here to answer any questions you might have, Mr. Chairman, and I would like to introduce them with your permission.

Mayor Maurice Meyers from Beaumont. Please stand. Councilman Loren Wood from Friendswood, Mayor Ron Crowder from La Marque, Councilman Arthur Guidry of Port Arthur, Commissioner Paul Hopkins of Galveston, Judge Richard Le Blanc of Jefferson County, and Commissioner Rolfe Christopher, Chairman Walter Crawford of the Beaumont Navigation District, and their attorney Hubert Oxford.

Mr. Marcus Junemann of Galveston County Draining District 2, along with Max Dorsett, Port of Galveston general manager Chuck Devoy, Mr. James Smith and Commissioners Joel Levingston, Jerry McNeill, Joe Lyday, and Mrs. Lyday, Jefferson County Drainage District No. 7, and Chairman Danny Wheat of the Jefferson County Flood Control Committee.

PREPARED STATEMENTS

And I would ask permission to submit, and I would say that I believe Senator, you have those statements.

Senator SASSER. Yes, I do; I have them in detail and they will be included along with your full statement.

[The statements follow:]

STATEMENT OF HON. JACK BROOKS, U.S. REPRESENTATIVE FROM TEXAS

Mr. Chairman, thank you for the opportunity to appear today to urge the subcommittee's favorable consideration of the public works projects for the Ninth Congressional District of Texas included in the fiscal year 1982 budget.

Mr. Chairman, I support funding those items included in the budget proposal and in the interest of time will submit a list of them with my statement rather than discuss each one individually.

In addition, I am requesting that two projects which were authorized last year, but which are not in the budget for fiscal year 1982, be funded to the full extent of the Corps of Engineers' capability. These are the Dickinson Bayou Flood Control Study for $50,000; and the Pleasure Island at Port Arthur Study for $65,000. The objective of the Dickinson Bayou study will be to determine the feasibility of nonstructural and structural measures to reduce flood damages in the Dickinson Bayou watershed, where flooding has caused unbelievable hardship to its residents. The Pleasure Island study will determine the cause of and evaluate possible solutions to the serious erosion problem occurring along the north and westerly side of the 18-mile long island. I believe both are worthy of your support.

Mr. Chairman, I also wish to express my strong support for the Taylors Bayou construction project which is in the budget for $250,000, but for which the Corps of

Engineers now has a capability of $2,100,000. I urge your subcommittee to fund this project to the full extent of the Corps' capability for the first phase of construction. It is of the utmost importance that construction of this drainage and flood control project begin as soon as possible. People in Jefferson County have already suffered greatly from flooding in the area and it is certainly time for work to begin to help alleviate this serious problem. As I advised you last year, a successful bond election in the fall of 1979 raised $17 million which, when added to $3 million of funds already available to the local sponsors, brings the total of the local sponsors' share to $20 million. I am proud of the support this project is receiving at the local level.

As a matter of information to your subcommittee, Mr. Chairman, I would like to make note of a very important development project in Galveston County—the Galveston Onshore Multipurpose Deepwater Port. The Corps of Engineers has already granted this project a permit. It will require the dredging of the 22-mile channel, which will have an initial depth of 56 feet offshore and 54 feet onshore and will accommodate crude oil tankers and dry bulk carriers of less than 150,000 dwt., fully loaded, and crude oil tankers of up to 320,000 dwt., lightened to 50 feet operating draft capacity.

The project also includes construction of a modern 1.2 million barrel-a-day oil terminal capable of handling VLCC's; the development of the gulf coast's first deepwater coal export facility; and the expansion of existing grain export facilities to permit increased volume of export grain to pass through the Port of Galveston at significant ocean freight savings. The oil terminal facilities and coal export facility will be owned and operated by private industries.

This is an extremely important undertaking and will add tremendously to America's competitive position in the world market. Although I am not here today to request funding for this project, it probably won't be long before I am and I wanted you to be aware in advance of this project, the concept of which I have supported for at least 10 years.

Mr. Chairman, as always, I cannot end this testimony without a short statement about the Wallisville saltwater barrier project which, as you know, has been held up due to litigation, pending a new environmental impact statement. I am informed by the Corps of Engineers that they now expect to have their final EIS ready for submission to their southwest division for review in May 1981. If it follows normal procedures and goes through regular channels, hopefully by early next year, the new Wallisville project will be sent to Congress for authorization.

Mr. Chairman, again I appreciate your kind consideration. All of these Federal public works projects are critical to the economic development of my district with its many petrochemical plants and heavy industrial operations that are so vital to our country. Ports along the Texas gulf coast are an integral part of the economy of the Nation. These projects insure the productivity and growth of that area and help to remove the ever-present threat of flooding and its tragic effects.

I have with me today a number of persons vitally concerned with these projects and here to support these statements and to answer any questions the subcommittee may have. I would like to introduce them at this time:

City of Beaumont—Mayor Maurice Meyers; City of Friendswood—Councilman Loren Wood; City of La Marque—Mayor Ron Crowder; City of Port Arthur—Councilman Arthur Guidry; County of Galveston—Commissioner Paul Hopkins; County of Jefferson—Judge Richard LeBlanc and Commissioner Rolfe Christopher; Beaumont Navigation District—Chairman Walter Crawford and Attorney Hubert Oxford; Galveston County Drainage District No. 1—Commissioner Dean Britton; Galveston County Drainage District No. 2—Chairman Marcus Junemann, Commissioner Max Dorsett, and Commissioner Alec Creagh; Port of Galveston—General Manager Chuck Devoy; Jefferson County Drainage District No. 6—President Sam Smith; Jefferson County Drainage District No. 7—Commissioners Joel Levingston, Jerry McNeill, and Joe Lyday; and Jefferson County Flood Control Committee—Chairman Danny Wheat.

I also submit for the consideration of the subcommittee statements in support of these projects from the following:

Cities of—Beaumont, Friendswood, Groves, La Marque, Nederland, Port Arthur, and Texas City; Counties of—Galveston and Jefferson; Ports of—Beaumont, Galveston, and

Port Arthur; Chambers of Commerce of—Friendswood, Hitchcock, and Port Arthur; and Projects—Beaumont Navigation District, Chambers-Liberty Counties Navigation District, Clear Creek Drainage District, Galveston County Drainage Districts Nos. 1 and 2, Jefferson County Drainage District Nos. 3, 6, and 7, Jefferson County Flood Control Committee, Lower Neches Valley Authority, Imperial Estates I Civic Club, Friendswood, Tex., Guy C. Jackson III, Anahuac, Tex., Michael G. Chatham, Friendswood, Tex.

NINTH DISTRICT, TEXAS PROJECTS—FISCAL YEAR 1982 FUNDING REQUESTS

[In thousands of dollars]

Project or study	President's fiscal year 1982 budget	Fiscal year 1982 capability amount
General investigations:		
Dickinson Bayou flood control[2]	0	50
Galveston Bay area navigation[2]	720	720
Pleasure Island erosion	0	65
Advance engineering and design:		
Clear Creek	300	300
Neches River salt water barrier	250	250
Construction:		
Highland Bayou	800	800
Taylors Bayou[1]	250	2,100
Texas City and vicinity, hurricane-flood	2,800	2,800
Texas City channel industrial canal	3,752	3,752
Operation and maintenance:		
Galveston Harbor and channel	8,578	8,578
Gulf Intracoastal Waterway	10,216	18,916
Houston ship channel	5,656	12,666
Sabine-Neches Waterway	7,858	7,858
Texas City channel	1,552	1,552

[1] Project with higher Corps' capability for which the higher amount is requested.

[2] Projects not in budget for which the Corps' capabilities are requested.

Letter From James W. Martin, Port Director, Port of Beaumont, Beaumont, Tex.

March 27, 1981.

Hon. Mark Hatfield,
Energy and Water Development Subcommittee, Senate Committee on Appropriations, Washington, D.C.

Dear Senator Hatfield: The Port of Beaumont Navigation District of Jefferson County, Tex., strongly supports that item in the fiscal year 1982 budget for public works which proposes $7,850,000 for continued operation and maintenance of the Sabine-Neches Waterway and respectfully urges favorable consideration and action by your committee.

In this connection the Port of Beaumont Navigation District of Jefferson County, Tex., fully supports the statement which has been submitted by the Beaumont Navigation District of Jefferson County, Tex., which is the local sponsor of the Sabine-Neches Waterway as authorized by Congress.

The Port of Beaumont Navigation District of Jefferson County, Tex., is the agency which operates and maintains the public wharves of the Port of Beaumont.

We have repeatedly expressed ourselves to the Energy and Water Development Subcommittee in previous years that in our opinion the Sabine-Neches Waterway has not been adequately maintained. We based our statement on the infrequency with which Corps dredges are seen in the upper reaches of the waterway and upon hydrographic reports issued by the Corps of Engineers showing the controlling depths available in the waterway.

We have not changed our opinion in this respect, and we believe that more frequent dredging for maintenance purposes is a prerequisite to efficient use of the ship channel.

The frequency with which very large deep-draft vessels enter this ship channel to work at both private and public wharves along the waterway has risen sharply in recent years and is continuing to increase. Proper maintenance is absolutely essential if the marine terminals in our area are to continue operating at anything approaching maximum efficiency.

Once again we respectfully urge your committee to approve the requested funds.

Sincerely,

JAMES W. MARTIN.

STATEMENT OF MICHAEL G. CHATHAM, FRIENDSWOOD, TEX.

In July of 1979 my home was flooded with six feet of water. Two months later I received another 2 feet of water in my home. Eighteen months later, after much hard work, my home is back together. Physically, my family and I are mostly recovered. But the emotional scars remain. A couple of days of rainfall send us into a frenzy of activity. We start to put our valued possessions up to what we perceive to be safety. The potential of another flood is real.We do not feel that we are dealing only a freak weather accident. With our semi-tropical climate, we are prone to daily rainfall throughout the Spring and Summer. When these rainfall inches begin to add up, Clear Creek starts to rise at an alarming rate -- and our worries rise in direct proportion to the Creek.

The only solution we can see is a major rectification of Clear Creek. We appeal to you to help us with this project. We need time, in the form of dry weather, and money in equal measures. We realize you can do nothing to control the weather, but you do have the power to appropriate a portion of the money that will enable us to continue with the recification of Clear Creek.

In this time of budget cut backs, we understand the financial pressures that you and your committee must be under. Hopefully, we can economize in other areas to allow our flood control measures to continue. We perceive flood control on Clear Creek to be the most important problem facing our area today and in the future. The economic stability, along with the personal security of all of us living in this area depends entirely on the condition of Clear Creek. Please consider this appropriation carefully and with full awareness of the importance of the problem.

Thank you for your time.

STATEMENT OF MARCUS JUNEMANN, CHAIRMAN, GALVESTON COUNTY (TEX.) DRAINAGE DISTRICT NO. 2

Your favorable consideration is sincerely requested by the Commissioners of Galveston County Drainage District Number Two for the continued funding of the Texas City and Vicinity Hurricane Protection (Construction), Highland Bayou (Construction) and for the Dickinson Bayou (Investigations).

The Texas City and Vicinity Hurricane Protection (Construction) project is over 90% complete with a contract currently under construction to complete raising of the La Marque section. Continued funding in the amount of $2,800,000 is required to complete protection of the Texas City Industrial Complex and the residences of Texas City and La Marque. The area to be protected has subsided over 6 feet in the past years. Only completion of the Hurricane Protection Levee and the related pumping system can provide protection to the Texas City industry. These industries' uninterupted operation is in the best interest of the government.

The Highland Bayou (Construction) project is over 70% complete with a contract currently under construction to complete upper channel excavation and install the diversionary dam. Continued funding in the amount of $800,000 is required to complete the channel enlargement of the upper end. This channel enlargement along with the diversionary dam will drain the upper part of the Highland Bayou watershed and divert same into the previously completed channel. This work will relieve a large portion of the City of Hitchcock which floods along the lower reaches of the bayou.

In addition to the above project, we request your favorable consideration of the Dickinson Bayou (Investigations) project in the amount of $50,000. The lower section of Dickinson Bayou has flooded two times in 1979 causing extensive damage. This project will better define the cause and possible corrective actions of this problem.

As the Texas City and Vicinity Hurricane Protection (Construction) and Highland Bayou (Construction) are reaching the final stages of construction, words cannot express the importance of your favorable consideration in recommending the continued federal funding toward completion of these projects.

STATEMENT OF DOW WYNN, GENERAL MANAGER, PORT OF PORT ARTHUR, TEX.

We respectfully solicit your favorable consideration of the F.Y. 1981 Fund-request by our Congressman Jack B. Brooks, for the Operations and Maintenance of the Sabine Neches Waterway of Texas and Gulf Intracoastal Waterway of Texas. Your study of the request will verify that only minimally necessary funds are requested, to insure the operation and maintenance of these vital federal waterways projects.

Five major refineries on our Sabine Neches Waterway produce ten percent or more of America's energy fuels, relying increasingly on greater numbers of tankers to bring in import crudes, handling domestic and export shipments as well. This Waterway, handling more than 60,000,000 S/T of waterborne commerce annually, is among the ten busiest of America's arteries of ocean commerce. The economic and military security of this nation is dependent on keeping them open and expanding... now more than ever before.

The Gulf Intracoastal Waterway of Texas is an indispensable link between more than 150 chemical and petrochemical plants and other refineries, all essential to the security of this nation. Combined tonnage across the Gulf Intracoastal Waterway (66,000,000 tons/annum) is increasing at the rate of 10% annually. Combined plant investment of these essential industries exceeds $30 billion, just on the Texas segments of the Gulf Intracoastal Waterway, alone.

We salute the efforts of Congress to effect budget cuts and economies wherever possible. Please note that no new construction is anticipated in these requests, and the dollars appropriated are just as vital to our economy and national defense as any monies spent for business stimulation or military procurement purposes.

Your favorable consideration is justified, we submit, and respectfully solicited.

STATEMENT OF RON CROWDER, MAYOR, LA MARQUE, TEX.

Your favorable consideration is sincerely requested by the City of La Marque for the continued funding of the Texas City and Vicinity Hurricane Protection (Construction), Highland Bayou (Construction) and for the Dickinson Bayou (Investigations).

The Texas City and Vicinity Hurricane Protection (Construction) project is over 90% complete with a contract currently under construction to complete raising of the La Marque section. Continued funding in the amount of $2,800,000 is required to complete protection of the Texas City Industrial Complex and the residences of Texas City and La Marque. The area to be protected has subsided over 6 feet in the past years. Only completion of the Hurricane Protection Levee and the related pumping system can provide protection to the Texas City industry. These industries' uninterrupted operation is in the best interest of the government.

The Highland Bayou (Construction) project is over 70% complete with a contract currently under construction to complete upper channel excavation and install the diversionary dam. Continued funding in the amount of $800,000 is required to complete the channel enlargement of the upper end. This channel enlargement along with the diversionary dam will drain the upper part of the Highland Bayou watershed and divert same into the previously completed channel. This work will relieve a large portion of the City of Hitchcock which floods along the lower reaches of the bayou.

In addition to the above project, we request your favorable consideration of the Dickinson Bayou (Investigations) project in the amount of $50,000. The lower section of Dickinson Bayou has flooded two times in 1979 causing extensive damage. This project will better define the cause and possible corrective actions of this problem.

As the Texas City and Vicinity Hurricane Protection (Construction) and Highland Bayou (Construction) are reaching the final stages of construction, words cannot express the importance of your favorable consideration in recommending the continued federal funding toward completion of these projects.

STATEMENT OF SAM O. SMITH, PRESIDENT, JEFFERSON COUNTY (TEX.) DRAINAGE DISTRICT NO. 6

We urgently request appropriation of funds for continuation of the Federal project on Taylors Bayou, authorized by the Flood Control Act of 1965, and providing for enlargement of the main stream channels in the Taylors Bayou watershed to provide flood protection to the City of Beaumont and major drainage outlets for the remainder of the watershed.

The project will provide badly needed drainage for 60% of Jefferson County, Texas. As the area has developed, flood control problems caused by rapid runoff of rainfall have multiplied because of inadequacy of major outfalls, and severe flood damage has occured several times in recent years.

In 1965, the voters of Drainage District No. 6 approved an $8,000,000 bond issue for drainage improvements in the Beaumont Texas area. Since Taylors Bayou and its tributaries serve as the outfall for almost all of the District, $1,000,000 was included for participation in the Taylors Bayou Project. Most of the other work included in the District's program has now been completed, but its effectiveness is directly dependend on improvements to the major outfalls.

Construction funds were appropriated for the Federal share of the Taylors Bayou Project for several years, beginning with FY 1972, but progress was delayed for further environmental studies and assessment of public hearings. In addition, escalation of estimated costs of the project caused some uncertainty as to availability funds for the "local share" of the project.

After several relatively dry years, the area suffered two major floods in 1979 alone. In November of 1979, the voters of Drainage District 6 approved a bond issue of $15,000,000 to be added to the $1.5 million still available for Taylors Bayou out of the 1965 bond issue. We are currently making plans to sell the new bonds and have retained bond and security counsel for this purpose, thus it is obvious that we will have no trouble meeting our obligations with respect to local participation.

We understand that the President's budget includes $250,000 for "construction" on the project. It appears that this would be only enough for continuation of engineering, with actual construction to begin in October 1982. However, we believe that progress of the Corps' work is such that the first contract could be awarded early in Calendar Year 1982, if funds were available, and we urgently request that the appropriation for FY 1982 be increased to at least $2,000,000 so that the actual construction can begin as soon as possible.

The need for the project cannot be overstated. Our flooding problems continue to grow with development of the area. In addition to the severe flooding in April and July of 1979, in September, 1980, Tropical Storm Danielle brought additional disastrous flooding, with homes being flooded for the third time in less than 2 years. Disaster summary outlines compiled damage of almost $40 million to crops, homes and businesses, schools and public property, along with all of the immeasurable miseries of flooding; disruption of business, industrial, educational and personal activities.

The Taylors Bayou Project would greatly reduce damages such as these, thus it is obvious that the project would have already "paid for itself" had it been completed when construction funds were first appropriated.

All of the local agencies involved continue to support the program and its implementation is a must if we are ever to have adequate drainage in the area affected.

Your approval is respectfully requested.

STATEMENT OF BEAUMONT NAVIGATION DISTRICT, JEFFERSON COUNTY, TEX.

SABINE-NECHES WATERWAY

The Beaumont Navigation District of Jefferson County, Texas is the local sponsor of the Sabine-Neches Waterway as authorized by Congress.

The Sabine-Neches Waterway is a federally maintained navigation project extending from the Gulf of Mexico, through a jettied entrance at the mouth of Sabine Pass, inland to the deepwater ports of Port Arthur, Beaumont, and Orange, Texas, a total distance of approximately 84 miles. The project includes deep draft channels of the following dimensions; 42 feet deep and 800 feet wide across the Sabine Bank in the Gulf of Mexico; 40 feet deep and a varying width of 800 feet to 500 feet through the jetty channel; a depth of 40 feet and a width of 500 feet from the jetty channel to the Turning Basins at Port Arthur; a 40 foot depth and a 400 foot width from Port Arthur via the Sabine-Neches Canal and the Neches River to the Port of Beaumont; a 30 foot depth and a 200 foot width from mouth of Neches River upstream thru the Sabine River to the Port of Orange.

In addition to the above dry cargo ports, Mobil Oil Corporation, Texaco, Incorporated, Gulf Oil Company - U. S., American Petrofina Company of Texas and Union Oil Company of California have located their major refineries along this ship channel. These five refineries have a total rated processing capacity of 1,339,000 barrels of crude oil per day. This is approximately 12% of the nation's refining capacity. A great majority of this crude oil is imported by tankers through this waterway. The ports and energy related industries along this channel have billions of dollars invested in wharves, docks and plant installations. A recent survey made by the Port Arthur Chamber of Commerce reveals that an energy related industry expansion program of 750 million dollars is now underway, and, additional expansion to cost 1 billion 900 million dollars over the next three to four years has been planned. The potential for additional industry expansion over the next ten years is estimated in excess of 4 billion 100 million dollars.

Sunoco Terminals, Inc., a subsidiary of Sun Oil Company has had a tremendous construction and enlargement program during the past five years on the channel and additional expansion is planned.

In addition to providing crude oil to local refineries, Sunoco also furnishes the Texoma Pipe Line with considerable oil for their facility. This pipeline originates on the ship channel above Port Arthur, Texas and terminates at Cushing, Oklahoma at which point crude oil is carried by connecting piplines to the midwest, the ultimate capacity of the Texoma line being 600,000 barrels per day. The Department of Energy has invested in excess of 35 million dollars in Sunoco's facilities not including the cost of a pipeline to the Hackberry Strategic Reserve Salt Dome oil storage terminal. The majority of this commodity is foreign imported crude oil and to handle this volume required some 650 tankers in 1980. 1981 will require approximately the same number of vessels but these vessels will be larger, consequently the tonnages will be greater in 1981 and 1982. This traffic will further congest this already extensively used waterway.

All of this great development is largely due to the existence of the Sabine-Neches Waterway, the area's life line to the world for its exports and imports.

This extensive and expanding complex comprises a critical basic energy related industry that is absolutely vital to the nation's economic and energy needs. Their diminution for any reason would have a deleterious effect nationally as well as regionally.

The Corps of Engineers found that in 1978 there was in excess of 86,000,000 tons of dry and liquid cargo shipping on this waterway. The tonnage figures for 1979 and 1980 have not yet been released but substantial increases for both years over 1978 are a certainty. Shipping of this magnitude necessarily involves the use of a great many vessels which, of course, creates congestion on the waterway. To compound the problem, the present size of the grain ships, oil tankers and other cargo ships using this waterway are such that an even deeper and wider channel is badly needed.

Recent studies by the Corps of Engineers and complaints from the shipping industry reflect that there is serious siltation and shoaling in the Gulf entrance channel at Sabine, with extensive shoaling along several reaches of the inland channels. They find that these conditions will rapidly become worse and if not corrected, eventually the channel could be closed to deep sea navigation.

In correcting these conditions it will decrease chances of collisions and groundings of the many hundreds of vessels carring crude oil and refined products. Such occurences, as stated by the Corps of Engineers in their environmental impact report "would result in adverse environmental impact and public health hazards. Failure to maintain the channel would result in severe adverse economic effects on the project area, the state and the nation. Effects would include loss of billions of dollars worth of facilities adjacent to the channel, loss of employment for several thousand people and disruption of the manufacture and transportation of a significant portion of the nation's "fossil fuel supply".

The Corps of Engineers' break-down of the 7 million 8 hundred fifty-eight thousand dollars included in the proposed budget for F. Y. 1982 is as follows: $3,106,000 for hopper dredging in the Gulf and Sabine entrance of the ship channel; dredging in the inland channels, $4,548,000; administration, engineering, surveys, etc., $204,000.

As the sponsoring agency, Beaumont Navigation District stands ready to provide all needed disposal land areas, rights-of-way, relocations and confining structures for this project.

The District, representing the above mentioned many ports, refineries, grain elevators and other shippers using this Waterway, supported by our Congressman, the Honorable Jack Brooks, respectfully request your favorable consideration for the inclusion of 7 million 8 hundred fifty-eight thousand dollars in the F. Y. 1982 budget, in order that this badly needed work can be accomplished.

TAYLORS BAYOU

The Beaumont Navigation District, as one of the sponsors of the Taylors Bayou Drainage and Flood Control Project is responsible for the operation of the Navigation and Salt Water barrier gates near the mouth of Taylors Bayou.

Over a forty year period we have been in a position to observe the numerous artifical changes in the area that have adversely effected drainage of this stream.

The first set of existing gates were installed in 1937 and functioned as salt water barriers not as flood gates. Later the J. D. Murphee Wildlife Management Area was created by constructing a system of levees along Taylors Bayou and the Intracoastal Canal restricting the natural course of flood waters across the wet lands into the Intracoastal and thence to the Gulf. Then in 1972, the Rhodair Gulley, Lakeside and Alligator Bayou pump stations of the Port Arthur Hurricane Protection System were installed. These pumps have a combined capacity of over two million gallons per minute and discharge into the lower reach of Taylors Bayou just above and below the salt water gates. These pumps operate during periods of flooding, raising the level of the Bayou which backs water up into homes and streets of Beaumont. State highway 73 running from Port Arthur west to Winnie is yet another obstruction to the traditional flow of water from the developed section of Beaumont toward the Gulf. During a rain of any magnitude a one to three foot differential build up on the North side of this highway holding water on the developed areas of North Jefferson County.

Funds for Phase I of the Taylors Bayou Project are urgently needed this year before more damage is inflicted on the home owners and businesses of our community. In all of the five public hearings held on this project during the past 35 years, Phase I (opening up the lower end of Taylors Bayou) has been the most acceptable part of the project, even environmentally. The present request for $250,000 during FY 1982 should be increased to at least $2,000,000 so that the first contract for enlarging the outfall canal into the Intracoastal could be let early in 1982.

We greatly appreciate your efforts on behalf of the citizens of Jefferson County for promoting this and the many other improvements in our Community and wish you success in obtaining funds to begin this critical project.

LETTER FROM BERNIS W. SADLER, MAYOR, PORT ARTHUR, TEX.

March 10, 1981

The Honorable Mark Hatfield, Chairman
Energy and Water Development Subcommittee
Senate Committee on Appropriations
Washington, D. C. 25015

SUBJECT: PLEASURE ISLAND AT PORT ARTHUR
(INVESTIGATION)

Dear Chairman Hatfield:

This letter is to urge the Energy and Water Development Subcommittee to include $65,000 for the investigation of Pleasure Island Bank erosion. This is a valuable strip of land for recreational, commercial and industrial use, approximately 16 miles long, that is being rapidly eroded away by the wave action of ships and boats, which is destroying approximately 25 acres of land each year.

This soil is normally washed back into the ship channel and has to be removed annually, causing expensive maintenance in the upkeep of this important waterway.

A major State highway is also being endangered by this erosion. The land area usefulness as a barrier against hurricane wave action is being destroyed.

Again, we urge that the Federal government make a thorough investigation into this severe problem that exists along the Sabine Neches waterway.

SUBJECT: GULF INTRACOASTAL WATERWAY
(OPERATION AND MAINTENANCE)

The City of Port Arthur fully supports the request for $10,216,000 for operation and maintenance of the Intracoastal Waterway System.

Approximately 12 miles of the busiest part of this waterway is within the City limits of Port Arthur, and it plays a vital role in serving the major industry of this area.

The City of Port Arthur would like to go on record in support of this important waterway system and encourages you to approve funds for continued operation and maintenance.

SUBJECT: SABINE-NECHES WATER
(OPERATION AND MAINTENANCE)

The City of Port Arthur would like to go on record for approval of the Fiscal Year 1981 funds, $7,858,000, as requested by our Honorable Congressman Jack Brooks.

The economic wellbeing of all citizens in Southeast Texas and this Nation is dependent upon adequate deep water for the transportation of goods produced to serve the Nation. Approximately 11% of the Nation's oil supply is handled in this area.

Your favorable action would be appreciated.

SUBJECT: TAYLOR'S BAYOU
(CONSTRUCTION)

The City of Port Arthur fully supports the request of Jefferson County Drainage District #6 for the Fiscal Year 1982 for $250,000 to plan for the construction of flood control on Taylor's Bayou, which drains the largest watershed area in Jefferson County.

Serious drainage problems in Beaumont and in the extraterritorial area of Port Arthur have caused major damage by the flooding of this Bayou. The flooding was caused by the normal development of the upper watershed area, certain restrictions in the lower watershed area, and heavy rains this past year.

The City of Port Arthur wishes to go on record in support of this flood control project and encourages you to approve funds for the continuation of this project.

Sincerely yours,

Bernis W Sadler
Bernis W. Sadler
Mayor

STATEMENT OF LAMARR BEATTY, PRESIDENT, IMPERIAL ESTATES I CIVIC CLUB, TEXAS

I represent 44 families in Friendswood. All of us were flooded twice in 1979 and threatened several time since then. We consider the rectification of Clear Creek to be one of the most important projects on which our tax dollars will be spent. Not only our financial security, but emotional stability, depends on Clear Creek.

We ask you to consider very carefully the $300,000 appropriation request for Clear Creek. The only other thing, besides money, that can help our situation is dry weather. Since the Senate can not, feaseably, control the weather, please help out our situation with funds to continue our flood control efforts.

Our neighborhood would like to do more than keep our Federal Flood Insurance premiums paid. We have comprehensive flood control plans in the works, complete with flood plain management. recification, and public awareness of the problem. The only reason we would not complete this project would be the lack of funds. The interest and exposure is high on this issue. I urge you to view this appropriation in a positive manner.

In advance, I thank you for your time and consideration on this issue.

STATEMENT OF EUGENE RASHETA, CHAIRMAN, JEFFERSON COUNTY (TEX.) DRAINAGE DISTRICT NO. 7

The Board of Commissioners of Jefferson County Drainage District No. 7 wants to endorse the appropriation for the Taylors Bayou Drainage and Flood Control Project of Jefferson County, Texas, provided for in the proposed budget for fiscal year 1982.

The majority of the 107 square miles located within the boundaries of Jefferson County Drainage District No. 7 discharges into the Taylors Bayou System, either through pumping stations or by gravity flow, as does 60% of the drainage of Jefferson County.

Our area, being generally flat and low-lying and subject to heavy rainfalls, has always been faced with drainage problems. Flood levels in Taylors Bayou and its tributaries have been responsible for aggravated flooding conditions even in the upland areas, and restricted channels have hindered the natural flow of water.

Drainage District No. 7, as well as the other drainage districts within Jefferson County have accomplished much work within their respective areas. Development in the higher elevations and improved drainage have greatly increased the runoff to the Bayou. For our improvements to be fully effective, however, the Taylors Bayou system must also be improved.

Drainage District No. 7 is especially interested in seeing the construction of the by-pass channel and the dredging as planned under Phase I of the project.

This project was originally recommended by the U.S. Corps of Engineers in 1948. The Project, considered important at that time, is needed even more today. Delays in the project have greatly increased its cost. Continued delays will not only increase the cost still more but will subject the citizens of the county to continued flooding conditions.

The financing by local sponsors has been provided for. Environmental problems have been worked out with the various agencies involved. It appears that the Project, with funding by the Congress, can now by commenced.

The President's budget calls for $250,000 for the project. This will only provide for design engineering. With the present progress of the Project, we believe that construction can begin during the fiscal year 1982. We do not know the capabilities of the Corps of Engineers, but would like to see a contract awarded on Phase I of the Project. To do this would require a $2,000,000 appropriation. We respectfully request that the money designated for the Taylors Bayou Project be increased to $2,000,000 for the fiscal year 1982.

We would appreciate the committee's favorable approval of sufficient funds to make a substantial start on the Taylors Bayou Project.

STATEMENT OF D. P. WHEAT, JR., CHAIRMAN, JEFFERSON COUNTY (TEX.) FLOOD CONTROL PROJECT COMMITTEE

Thank you for allowing me the opportunity of making this statement in support of the Taylor's Bayou Flood Control Project. I represent a Citizens Committee which successfully passed a bond issue election in 1979 for $15 million, as the major part of our local share of the project. Please consider the following:

1) Over $39 million dollars in damages to homes, businesses, roads and corps occurred as a result of two severe floods in 1979.
2) The local share is committed and the bonds are ready to be sold.
3) A favorable hearing on the Environmental Plan was held in December, 1980 and resulted in no major changes in the design.
4) The first construction money spent will eliminate the bottleneck at the outfall and give relief to the entire 640 square mile watershed.
5) I am for reducing Federal Expenditures and balancing our budget. However, Federal funds always seem to end up in flood disaster areas to help cover losses in the form of flood insurance payments, low interest loans, and grants. I believe the same funds should be spent to prevent the loss when possible.

This fund request should be considered as an investment in the future of the petrochemical center of our nation. Further development in our area is hampered by inadequate drainage. I urge your support of this item in the Appropriation Bill for Water Development in Texas.

STATEMENT OF LEROY MCCALL, JR., CHAIRMAN, JEFFERSON COUNTY (TEX.) DRAINAGE DISTRICT NO. 3

Jefferson County Drainage District No. 3 urgently requests that the appropriations of funds for the start of the Taylor's Bayou Flood Control Project be approved.

The voters of Drainage District No. 3, in 1980, passed a bond issue by almost a four-to-one margin authorizint the issuance of bonds so that the local entities could furnish their portion of the funds for the project.

Over the past several years, this area has experienced considerable growth and the danger of property loss from flooding has increased greatly.

Not only is theproject essential to alleviate flooding of homes but, under our modern rice farming methods, it is essential that there be a quick runoff of water. The necessary local drainage that has been effected in the rice production area has created a heavy burden on the lower reaches of Taylor's Bayou, Mayhaw and Hillebrandt Bayous and has created a hazard to a large portion of the industrial and populated area.

Therefore, the project is of vital importance to all portions of Jefferson County, including Jefferson County Drainage District No. 3, and it is imperative that funds be allocated for the commencement of the project.

Jefferson County Drainage District No. 3 urgently requests that the committee give consideration to including an appropriation of $250,000.00 in the forthcoming appropriations to permit the Corps of Engineers to proceed with the project.

Resolution of Groves City (Tex.) Council

RESOLUTION NO. 380

WHEREAS, the Groves City Council supports the following public works projects that Congressman Jack Brooks will present before the House Committee on Appropriations and Senator Lloyd Bentsen will present before the Senate Subcommittee on Appropriations on March 31, 1981:

a)	Clear Creek (Advance Engineering & Design)	$ 300,000
b)	Galveston Bay Area Navigation Study (Investigations)	720,000
c)	Galveston Harbor & Channel (Operations & Maintenance)	8,578,000
d)	Gulf Intracoastal Waterway (Operation & Maintenance)	10,216,000
e)	Highland Bayou (Construction)	800,000
f)	Houston Ship Channel (Operation & Maintenance)	5,656,000
g)	Neches River Salt Water Barrier (Advance Engineering & Design)	250,000
h)	Sabine-Neches Waterway (Operation & Maintenance)	7,858,000
i)	Taylors Bayou (Construction)	250,000
j)	Texas City & Vicinity Hurricane Protection (Construction)	2,800,000
k)	Texas City Channel (Operation & Maintenance)	1,552,000
l)	Texas City Channel Industrial Canal (Construction)	3,752,000

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GROVES, TEXAS:

THAT this body does hereby go on record as wholeheartedly supporting the above listed projects for funding in the 1982 Fiscal Year Budget; and

BE IT FURTHER RESOLVED that a copy of this Resolution be furnished Congressman Jack Brooks, Senator Lloyd Bentsen, and members of the House and Senate Subcommittees as evidence of the Groves City Council's support.

PASSED, APPROVED and ADOPTED this 16th day of March, 1981.

Sylvester Moore
Sylvester Moore, Mayor

ATTEST:

Gene K. Graham
Gene K. Graham, City Clerk

STATEMENT OF C. S. DEVOY, PORT OF GALVESTON, TEX.

The Port of Galveston is grateful for the opportunity to present this testimony for your consideration in reviewing the relative benefits of the various water development projects that are presently being proposed for the Galveston, Texas area. If, after reviewing this material, you have any additional questions, be assured that we will be pleased to work with you in every way possible to assist in the evaluation process.

There are three navigation projects in the Galveston area that need funding. We ask favorable consideration for inclusion of these projects in FY 1982 appropriations. These projects are essential to the economic well being of Galveston and the surrounding area. Our Port serves worldwide commerce. The appropriation of the funds for these projects is needed to assure the continued operation of our port facilities.

GALVESTON HARBOR AND CHANNEL

(Operation and Maintenance)

The $8,578,000 contained in the budget is necessary and adequate for the maintenance dredging of our Harbor and Entrance Channel to its authorized 40 foot project depth. The work is within the Corps' capabilities.

GALVESTON BAY AREA NAVIGATION STUDY

(Investigations)

The $720,000 included in the President's budget is adequate for the continuation of this study. This study of the future navigation needs of the ports in the Galveston Bay Area is necessary to give information to the federal government for orderly planning of future developments.

GULF INTRACOASTAL WATERWAY

(Operation and Maintenance)

We have been advised by the Corps that the $10,216,000 included in the budget for this work is not sufficient for this year's needs. An additional $8,700,000 will be required for the total program. We recommend the FY 1982 Budget for this item be increased to $18,916,000. This waterway is of vital importance to the entire Gulf Coast.

Of the various water development projects proposed for the Galveston, Texas area, surely the most significant from every aspect is the Galveston Onshore Multipurpose Deepwater Port - - a project which includes:

- The dredging of a 22-mile channel to permit VLCC's and other large commodity carriers to enter or leave the Port of Galveston with a draft of 50 feet.
- The construction of a modern 1.2 million-barrel-a-day oil terminal capable of handling VLCC's.
- The development of the Gulf Coast's first deep water coal export facility to facilitate shipment of western American steam coal to European countries in support of this nation's balance of payments objectives.
- The expansion of existing grain export facilities to permit increased volume of export grain to pass through the Port of Galveston at significant ocean freight savings, thereby adding to America's competitive position in the world market.

Of these four primary aspects of this project, the key to its success is the dredging of the 22 mile channel. With an initial depth of 56 feet offshore and 54 feet inshore, the channel will permit safe movement of vessels with a working draft of 50 feet. This means that the channel will accommodate crude oil tankers and dry bulk carriers of less than 150,000 dwt., fully loaded, and crude oil tankers of up to 320,000 dwt., lightened to 50' operating draft capacity.

Once completed, this channel, along with the other related aspects of the project, will play significant roles in helping the United States move closer to achieving a positive balance in its foreign trade payments.

The oil terminal, for example, was conceived three years ago as the most economic alternative for delivery of crude oil to the upper Texas Gulf Coast during the 1980's. While its main purpose is to provide unloading facilities for VLCC's, it also provides a reliable network of storage and transportation facilities for Texas refiners and shippers in the Texoma, Explorer and Seaway pipelines heading north to Oklahoma and interconnecting with pipelines to the mid-West.

For refiners located on the Houston ship channel, the terminal provides protection against potential supply interruptions that might occur from closing or blockage of the upper channel.

The terminal will handle up to 1.2 million barrels a day of crude oil -- much of it imported from the Middle East and North Africa. Transportation savings alone from this terminal could reduce foreign trade payments by up to $1.9 million a day - - while, at the same time, reducing costs to industry, and, eventually, to consumers.

The oil terminal facilities, storage facilities and distribution pipelines will be owned and operated by the Pelican Terminal Company, which is jointly owned by Philipp Brothers division of Engelhard Minerals and Chemicals Corporation, CBI Industries, Inc., and Northville Industries.

Northville recently announced that it had signed an agreement with the Panamanian Government to build a crude oil pipeline across Panama to facilitate movement of Alaskan oil in VLCC's to Gulf and Atlantic Coast ports. It is anticipated that with completion of the deep draft channel and construction of the Galveston oil terminal, much of that oil will be routed to Galveston, reducing dependency of refiners in the area on foreign oil and providing competitive transportation cost savings for Alaskan oil of at least $1.00 a barrel, delivered at Galveston.

All major federal, state and local permits for the oil terminal project have been obtained.

Negotiations for throughput agreements are in progress at this time. It is expected that the agreements, providing the minimum throughput of 750,000 barrels per day, will be completed this year. Construction financing will then be obtained, bids for construction received and contracts awarded so dredging can begin.

It will require two years to complete construction of the oil terminal project, so the total facility will be on line in the 1983-1984 time frame.

In a recent report to the President of the United States, the Interagency Coal Export Task Force noted that rapidly increasing prices for world oil coupled to global concerns over stability of oil supply has accelerated a worldwide re-evaluation of the role of coal in meeting energy needs.

Coal's contribution to the world's primary energy requirements fell from 49 percent in 1940, to only 29 percent in 1973. By 1979, however, coal's share of primary energy requirements had climbed back to 33 percent. And it has continued to climb ever since.

According to the Interagency Coal Export Task Force, by 1985 Europe will require some 100 million short tons of coal; by 1990, between 146- and 190-million short tons; and by 2000, between 273- and 343-million short tons of coal.

U. S. share of this market, meanwhile, is projected at 28 percent for 1985, 29 percent for 1990, and 47 percent for 2000 - - if we construct enough deep water facilities to handle the volume of trade.

As the Task Force noted, the immediate barrier to expanding the United States' role in international steam coal trade is our limited capacity within our ports. Because of this limited capacity, the Task Force believes that the practical limit of America's current coal export facilities was reached in 1980.

The Galveston Deep Water Coal Terminal is a joint venture of Philipp Brothers Division of Engelhard Minerals and Chemicals Corporation and the ORBA Corporation. It will be designed for the export of up to 10 million tons per year of steam coal to supply overseas consumers changing from oil or gas to coal.

This terminal, due to its scale of operation, would also be an efficient storage and transshipping area for imported barytes, a key ingredient of drilling muds for oil and gas wells, and iron ore which is presently used in substantial quantities for negative buoyancy coating of pipe in the laying of offshore pipelines.

The two companies are currently studying the equipment and the design of the terminal, the inland transport of coal to the terminal, and the ocean transport to overseas customers. The environmental permitting process is in progress, and permits should be granted during 1981.

Coal for the terminal would originate over a wide range of the Western coal-producing areas of New Mexico, Colorado, Wyoming and Texas. Since Galveston is connected to all of these states by railroads in such a way that single-line unit train railroad service is available, land transportation costs between coal producers and the terminal will be minimized, adding still further to the competitive advantage of shipping through the Galveston Deep Water Coal Terminal. Ocean freight savings are estimated as $3.00 per ton on coal shipped between Galveston and Rotterdam in bulk carriers of 100,000 dwt. or greater.

Because of the economies that accrue from being able to take advantage of shipping coal in deep-draft vessels, barge movements of coal down the Mississippi River and then to Galveston for subsequent shipment to Europe may be feasible, adding still further to the economic benefits of the terminal.

Of particular importance to America's ability to take advantage of growing foreign demand for steam coal, the Port of Galveston is the only port on either the Gulf or East Coasts with the necessary permits and completed channel engineering to begin immediate dredging of a deep draft channel. And it is the Gulf port closest to the Western coal mining areas that are considered most productive.

Since a Gulf Coast outlet for western coal exports is absolutely critical to America's ability to maximize its share of the European coal market, we hope you will consider giving Galveston priority consideration and encouragement in its deep draft dredging project.

Grain is one of America's leading export commodities. In a very real sense it has been a mainstay of the Port of Galveston's trade base since the turn of the century. Today, the port has two export grain elevators.

The newest elevator in Galveston, operated by Farmers Export Company, was completed in 1976. It was partially destroyed in December, 1977 and then rebuilt. It came back on line in October, 1980. This elevator is a highly automated, high speed elevator. It loaded 22 million bushels in January of 1981, and is capable of loading over 25 million bushels per month. Loading large ships is a definite advantage as there is less deadtime due to moving from hatch to hatch and from time moving ships in and out of the berth. Ocean freight savings of $5.00 to $6.00 per ton will be realized on grain shipments to those ports capable of receiving ships loaded to a 50-foot draft. This elevator is capable of loading the larger ships without requiring any modifications other than dredging the berth and the channel. And, channel deepening was considered in the original design.

The older elevator, operated by the Bunge Corporation, will require a new ship loading system to load the larger ships. The dock was rebuilt in 1972 and is designed for a deeper channel. Only minor internal modifications will be required to allow it to regularly handle deep draft vessels.

The construction of a third export grain elevator is being studied at this time. Market research indicates a need, and, the Federal Maritime Commission also has projected a need for additional export elevator capacity in the Gulf Coast area.

Of primary importance, the Galveston deep draft channel will also have an impact on other elevators in the West Gulf area. Typically, a 110,000 dwt. vessel can receive approximately 80,000 tons of grain when loaded to a 40 foot draft. Such a vessel could be loaded to 40' and then moved to a Galveston grain elevator and have an additional 30,000 tons loaded. This would spread the benefits of the channel to grain elevators from Brownsville, Texas, to Baton Rouge, Louisiana.

In addition, grain moving down the Mississippi by barge can be brought to Galveston and loaded to deep draft ships. Ocean freight savings would be for more than the additional cost of moving the barges to Galveston.

Once these various projects are completed and operating, it is our intention that all port revenues from coal, grain and crude oil will be reinvested in other port facilities such as a container terminal and general cargo docks which will also impact positively on foreign commerce and U.S. balance of trade payments. Galveston's break-bulk traffic is very heavily oriented towards exports -- primarily in such agricultural products as cotton, rice and flour. Modern facilities that meet the needs of new shipping technology are necessary to maintaining this flow of traffic. And the deep draft project will provide the revenue necessary to create those modern facilities. A modern deep draft multipurpose Port on the Gulf Coast is definitely in the national interest.

It is important to recognizing the validity of this testimony to note that a recent study conducted by the United States Department of Transportation found a benefit-to-cost ratio of 3.76-to-1 for the Galveston deep draft channel and oil terminal. That is a substantial benefit/cost ratio -- particularly in view of the fact the study did not include consideration of either the export coal terminal or the export grain facilities that are planned for the port. The addition of the coal and grain projects would unquestionably have increased this ratio even further.

While it may be true that other Gulf ports may be deepened in the future, the fact is that Galveston has the necessary permits and has completed the necessary engineering to begin dredging immediately.

Even if other coal and grain ports in the Gulf were to be able to move their deep draft plans onto "fast track," it would take them years to get to the position that Galveston is in today.

Again, Mr. Chairman, we would like to express our appreciation for the opportunity to present this testimony on behalf of the Galveston deep draft port project. Should you have any questions, or require clarification of any point, please do not hesitate to call upon us at any time.

STATEMENT OF GALVESTON COUNTY (TEX.) COMMISSIONERS' COURT

Galveston County has been the local sponsor with the U.S. Corps of Engineers for the construction of various flood control projects in Galveston County since the first seawall was started in Galveston shortly after the 1900 Hurricane. The Galveston seawall has now been extended in length to approximately 10 miles protecting the most populated part of the City of Galveston. In 1962 (some 14 years after the first local bond issue was passed), construction began on the seawall protecting the cities of Texas City and La Marque from the ravages of hurricanes and high tides of Galveston Bay. In addition, flood control projects have been initiated to prevent flooding along Highland Bayou in the cities of Hitchcock and La Marque, a project on which construction started in 1974, and along Clear Creek in the cities of League City and Friendswood in cooperation with Harris County and Brazoria County, although no construction has yet begun. Galveston County is also the local sponsor for a restudy of the flooding problems on Dickinson Bayou, a bayou which flooded 1,000 homes in 1979.

We appear before this Honorable Committee to urge your support for appropriations for these continuing projects in Galveston County. We do not request appropriations for any new projects and do not anticipate any such requests in the future.

TEXAS CITY-LA MARQUE SEAWALL

Construction of the Texas City-La Marque Hurricane Protection Levee is about 98% complete with construction having started in 1962, right after Hurricane Carla. The estimate for the entire project in 1962 was $22,600,000 ($15,700,000, federal; and $6,900,000, Galveston County). The federal government has already invested approximately $40,000,000 in the construction of this seawall, and Galveston County taxpayers have invested more than $15,000,000. Upon completion, the total investment in this flood control project will be nearly $60,000,000, about three times the 1962 estimate because of inflation.

Galveston County has funds for the local share needed to complete the seawall with the exception of the pump station in La Marque which does require additional local funds. The Commissioners' Court is prepared to submit whatever bond issue is needed in the future, but has already appropriated $2,000,000 in 1979, 1980, and 1981 County budgets to complete this project.

Therefore, we urge this Honorable Committee to approve the appropriations of $2,800,000 in the Administration's 1982 Budget for the Texas City-La Marque Seawall, which is the same amount the U.S. Corps of Engineers has stated they are capable of utilizing within the next fiscal year. Construction of the last major section of the seawall project was completed in 1976, and construction of the dogleg along IH 45 in La Marque to the required height of 19 feet is underway. All that remains is to construct the La Marque pump station, and that will complete the protection around Texas City and La Marque.

HIGHLAND BAYOU FLOOD CONTROL PROJECT

Galveston County first undertook the local sponsorship of the Highland Bayou Flood Control Project in 1960 when a request for a survey by the U.S. Corps of Engineers was initiated. Construction began in 1974 after 14 years of study and engineering. Serious flooding has occurred frequently during this period of time along the Highland Bayou areas which flows through the cities of Hitchcock and La Marque to Galveston Bay, most recently in July and September of 1979. Local bond funds in the amount of $2,250,000 have been available since 1964, and an additional $700,000 was voted in 1971.

The first phase of the Highland Bayou Diversion Canal was contracted in 1974 and completed in 1975. The second phase was completed in 1976 with the third and last phase now underway and within one year of completion. So it is extremely important that this project receive full funding based on the U.S. Corps of Engineers capability; that is, $800,000 for fiscal year 1982, so that inflation and delay will not cause the project cost to increase any more and so the residents along Highland Bayou will not suffer any more than they have. Heavy rains and flooding occurred in 1979 along Highland Bayou, and 400 to 500 homes were flooded. We must not let that occur again.

Therefore, the Galveston County Commissioners' Court urges the Committee to approve the appropriation in the Administration's budget for the Highland Bayou Flood Control Project in the amount of $800,000 for the next fiscal year so this important project can proceed as rapidly as possible and complete the work before the 1982 hurricane season.

CLEAR CREEK FLOOD CONTROL PROJECT

The Galveston County Commissioners' Court respectfully urges this Honorable Committee to authorize the $300,000 which the U.S. Corps of Engineers states is their capability in fiscal year 1982 and recommended by the Administration to conduct advance engineering and design on this most important flood control project in Galveston County, Harris County, and Brazoria County. After nine years of planning, the Corps of Engineers has made a final engineering decision on the type project to provide flood relief for over 500,000 people in the Clear Creek watershed and still protect the sensitive environment of Clear Creek which is a necessity if public support for the project is to be maintained. The three local sponsors (Galveston County, Harris County and Brazoria County Drainage District No. 4) support a rectification project which will accommodate a 10-year flood with the remainder of the 100-year flood plain to be protected by prohibiting any construction. Funds for the fiscal year 1982 will allow this final decision to be implemented with a final design memoranda scheduled to be submitted to the Chief of Engineers by the end of fiscal year 1981.

In 1979, over 2,000 homes in Friendswood and League City along Clear Creek were flooded twice, in July from Tropical Storm Claudette and again in September. Several thousand homes were also flooded in Brazoria and Harris counties. Losses from flooding in these three counties from the 1979 floods are well over $200,000,000. People are desperate to do something--almost anything--on Clear Creek, and the Corps of Engineers must expedite this project. We urge your approval of the $300,000 recommended for the Clear Creek Flood Control Project.

DICKINSON BAYOU

The Galveston County Commissioners' Court is urging this Honorable Committee to approve $50,000 for the Corps of Engineers to reopen the study of flood control measures on Dickinson Bayou. This money was not recommended in the Administration's budget, but it is extremely important to Galveston County, inasmuch as over 1,000 homes were flooded along Dickinson Bayou during Tropical Storm Claudette in July of 1979 because of rains in the watershed area from 20 to 40 inches over a 24-hour period. This caused between $40,000,000 and $50,000,000 in damages along Dickinson Bayou, and Galveston County is anxious to act as a local sponsor to try to relieve the flooding conditions. A study was done in the mid-1970's by the Corps of Engineers that found an inadequate benefit to cost ratio. However, we believe that extensive construction and development, nearly all of which was above the designated 100-year flood plain, and the possibility of another devastating flood will certainly change the benefits to be derived from flood control measures. We sincerely hope you will favorably consider this very important request.

Thank you for your consideration of these requests and for your time in allowing us to be present at these hearings. We stand ready to assist you in any way and to furnish any additional information you may require.

STATEMENT OF EVELYN NEWMAN, PRESIDENT, FRIENDSWOOD (TEX.) CHAMBER OF COMMERCE

The Friendswood Chamber of Commerce strongly encourages you and your Senate Committee on Appropriations to favorably consider the project concerning Clear Creek. Flood control on Clear Creek is the conerstone on which our economic Stability is built. Our 180 member businesses give flood control their utmost attention and support. The last six months of 1979 was one of our more depressed times, economically, due to the two floods that occurred in our area. In the "boomtown" atmosphere of Houston/Harris County, we should not be experiencing the threat of these hard times every time it rains. The advance engineering and design work proposed for Clear Creek will lead to ractification of the Creek that we so badly need. Through our Flood Control Committee, we will be following you decision very carefully.

Thank you for your considerations on this matter.

STATEMENT OF GUY C. JACKSON III, ANAHUAC, TEX.

While none of the Public Works Projects for the upcoming year scheduled for the 9th District of Texas will have a direct, immediate, personal impact on me, each will, in time, have an impact on myself, my family, my community, Texas and our nation. I am convinced that this impact will be a favorable one and for the good of the majority of our citizens and a worthwhile expenditure of our Federal Funds.

Knowing full well that you face strong pressure to cut back on all Federal expenditures, it is apparent that there are certain functions that are peculiarly those of the Federal Government, both historically and based on common sense and economics. These projects, because of their broad impact and their resulting economic, health or safety aspects cannot be categorized as being for just one section of our country.

Within the projects proposed for the 9th District of Texas this year there are 6 that have such a broad overall impact upon our nation to fit this category. These are the Galveston Bay Area Navigation Study, Galveston Harbor & Channel, Gulf Intra-Coastal Waterway, Houston Ship Channel, Sabine-Neches Waterway and Texas City Channel. Each of these is not just a local project, but one with world wide impact as the cargo moved on any of them comes from and goes to ports and nations all over our globe.

Other projects are a bit more local in nature. Clear Creek, Highland Bayou, Neches River Salt Water Barrier, Taylors Bayou, Texas City & Vicinity Hurricane Protection and Texas City Industrial Canal may have less of a national and global impact, but they do have a tremedous impact on the safety, health and welfare of the thousands and even hundreds of thousands of our citizens who live in the area and are directly affected by them.

Each of the projects of the 9th District of Texas merits your full consideration. They would not have reached this stage in the appropriations process if they were not worthy and needed. The good of the nation calls for them being funded and completed. I urge you to deliberate carefully, examine closely, weigh cautiously and when you are satisfied then vote favorably for the funding required for each of these projects.

STATEMENT OF GEORGE WOITENA, CHAIRMAN, GALVESTON COUNTY (TEX.) DRAINAGE DISTRICT NO. 1

Your consideration of continued federal funding of Highland Bayou (Construction) in the amount of $800,000 is hereby requested. Presently, the project is over 90% complete with contracts currently left to complete enlargement of the upper end of the channel and to install the diversionary dam. Completion of this project will significantly reduce flooding within the City of Santa Fe and the City of Hitchcock areas.

The Dickinson Bayou watershed seriously flooded twice in 1979 causing extensive damage. We request your approval of Dickinson Bayou (Investigations) in the amount of $50,000 to study the possible avenues of flood relief.

Galveston County Drainage District Number One is concerned, as are all our constituents over economy in government, but the completion of the Highland Bayou project, after years of planning and with construction being over 90% complete, would be a justified cost to benefit ration of our tax dollars.

STATEMENT OF JOE BROUSSARD II, PRESIDENT, BOARD OF DIRECTORS, LOWER NECHES VALLEY AUTHORITY

The Water Resources Development Act of 1976 authorized the Secretary of the Army, acting through the Chief of Engineers, to undertake the Phase I design stage of advanced engineering and design of the Salt Water Barrier in Neches River Basin at Beaumont, Texas.

The project will provide a gated water barrier in the Neches River at Mile 23 near Beaumont; a gated navigation by-pass channel; an access road and levee; and an auxiliary dam across a canal which drains an adjacent bayou . The proposed structure will prevent salt water from intruding into the LNVA intake canals as well as provide for free and unobstructed use of the existing navigable portion of the Neches River. The barrier will afford needed water quality protection to municipalities, the large petrochemical industries of Southeast Texas, and irrigation water for rice farmers. The swamp area upstream from the project would be improved for recreational swimming, boating, hunting and freshwater fishing.

Environmental comments from all agencies on this project have been favorable. Favorable environmental statements were given by:

- State of Texas
- Department of Interior
- Department of Agriculture
- Department of Transportation
- Department of Health,Education and Welfare
- Environmental Protection Agency

The Corps of Engineers has testified, before the House Subcommittee on Public Works, that the Corps has the capability of continuing advanced engineering and design on this project in FY 1982 provided funds in the amount of $250,000 are made available in their budget.

LNVA requests favorable consideration to appropriating the $250,000 necessary to continue advanced engineering and design of this much needed salt water barrier.

STATEMENT OF JEFFERSON COUNTY (TEX.) COMMISSIONERS' COURT

The Commissioners' Court of Jefferson County, Texas, would like to go on record in support of the following projects which pertain to Jefferson County to be presented on Tuesday, March 31, 1981, by Senator Lloyd Bentsen:

(1) Gulf Intracoastal Waterway
(2) Neches River Salt Water Barrier
(3) Sabine-Neches Waterway
(4) Taylors Bayou

It is our opinion that such projects should be included in the 1982 budget as these projects are vital to our area and are in the best interest of the citizens of Jefferson County.

STATEMENT OF WALTER D. SALYER, PRESIDENT, CLEAR CREEK (TEX.) DRAINAGE DISTRICT

The Clear Creek Drainage District joins other governmental bodies on Clear Creek in urging support of the Clear Creek Project. The imperativeness of the development of this Project was dramatically underscored by the severe flooding sustained in the area during both July and September of 1979. Estimates of loss in the area due to flooding during the aforementioned months is $230 million. The concern of the over 300,000 populace in this watershed for direct relief from the flooding problem is paramount.

The contemplated cost of the Clear Creek Project of $85 million is approximately one-third of the losses sustained in two months of 1979. The impact of a favorable and timely construction approval of the Project to southern Harris County, northern Brazoria County, and Galveston County is undeniable. The Project will make it possible to finally protect the valuable property investment in these areas and allow for continued stable growth without the imminent threat of destruction to homes, wildlife, farms, and businesses. Also it will remove the very real threat of loss of life as was experienced in the months of July and August of 1979.

The Clear Creek Drainage District has been granted the tax authority by the people to maintain the Galveston County portion of Clear Creek and its tributaries in a clean and attractive manner in contemplation of the near term construction of the Project. The immediate implementation of the Project must, however, remain an absolute priority in order to avert the disasterous results of last July and September.

In the past six years the Clear Creek flow rate has increased tenfold; rises to 25 feet from a normal two foot level; and stretches from a placid 3 - 30 foot width to a writhing 300 foot torrent in several areas; overflowing its banks to a width of 2,000 - 4,000 feet in Friendswood. This threat can be removed by the Congress through appropriation of funds to allow the Corps of Engineers to select a final design and proceed toward a recommended plan for construction.

We fervently hope that FY 1982 will be the year that construction is authorized for this project. We need top Corps of Engineers priority and Congressional backing. With your support and moral commitment we will see it happen.

On behalf of the Clear Creek Drainage District Supervisors and the people of the Clear Creek watershed who believe in this project we respectfully submit this testimony for inclusion in the record.

STATEMENT OF MAURICE MEYERS, MAYOR, BEAUMONT, TEX.

On behalf of the City of Beaumont, Texas, I respectfully request that favorable consideration be given to the Taylors Bayou Project, which has been scheduled for discussion before your subcommittee March 31, 1981.

Taylors Bayou is an integral part of a major drainage system upon which 80 percent of this community and 60 percent of Jefferson County must rely for drainage and flood protection.

Completion of the Taylors Bayou Project, because of the interdependent nature of this drainage system, will allow this City's existing facilities to operate effectively. Realistically, it offers the only means by which this municipality can successfully address the perennial threat of serious flood damage such as that which was experienced in April and July of 1979.

In April of 1979, we were declared a disaster area. Two times in 1980, we flooded again. We can't let our citizens continue to experience this trauma, when the solution is before us in the Taylors Bayou Project. Funding to begin work on this Project is necessary now. The development in our City has further compounded our flooding problems, and without Taylors Bayou, we are now an even greater flooding potential each time it rains.

Our country sends disaster relief all over the world. Surely, we can avoid such disasters in America. The payments made in settlement of flood loss and emergency assistance time and again can be permanently eliminated in Beaumont with the Taylors Bayou Project.

Our thanks for your help and support of this most vital Project.

STATEMENT OF DALE WHITTENBURG, MAYOR, FRIENDSWOOD, TEX.

Flooding conditions along Clear Creek is progressively worsening from year to year as a result of the tremendous increase in construction in the southern portion of Harris County which drains into Clear Creek. The large drainage ditches being constructed for these new subdivisions and shopping centers are directing a great deal more water into this small stream than the Creek has ability to handle. The resultant flooding is costing millions of dollars to the residents of Friendswood and other communities along the creek; many more millions are being paid out through coverage by National Flood Insurance.

We believe that the cost-effective factor involved with a flood control project on Clear Creek would more than justify the cost of the project, and possibly this year's funding of advance engineering and design would be the final stepping stone to bring about some relief for our citizens.

We, the City Council of the City of Friendswood, sincerely urge the Appropriations Committee and the Subcommittee on Energy and Water Development to include this project in the Fiscal Year 1982 Budget.

STATEMENT OF THOMAS A. WHEAT, CHAIRMAN, BOARD OF NAVIGATION AND CANAL COMMISSIONERS, CHAMBERS-LIBERTY COUNTIES (TEX.) NAVIGATION DISTRICT

This statement is presented by the undersigned, the duly designated Commissioners of the Chambers-Liberty Counties Navigation District, (a Water Conservation District created pursuant to the laws of the State of Texas), representing the 16,000 citizens of Chambers and Liberty Counties, Texas, who reside within the boundaries of said District.

I. The Wallisville Reservoir and Salt Water Barrier is a project in the lower part of the Trinity River, Texas, which was authorized by the River and Harbor Act of 1962 (Public Law 87-875) as a separate and self-contained project. It was designed as a multiple purpose reservoir for salinity control, navigation, water supply, fish and wildlife conservation, and recreation and is of primary importance to the lower Trinity River Basin, the City of Houston and its metropolitan area with a population concentration of more than two million people. Sponsorship of this project was initiated by this District for the sole purpose of preventing the intrusion of salt water into the lower river. The Trinity River Authority and the City of Houston later joined with this District as the local sponsors. These local interests have obligated themselves to pay 16% of the total cost of this project as their contribution to the cost of salinity control, water supply and recreation.

For over twenty years, this District has advocated the construction of a Salt Water Barrier, with a barge lock and a fresh water reservoir, near the mouth of the Trinity River. This River supplies water to four canal systems for the irrigation of approximately 60,000 acres of rice lands in Liberty and Chambers Counties with the resulting crop being valued at approximately $20 million. Historically, these operations have been plagued with salt water intrusion from Trinity and Galveston Bays during periods of low flow in the river. The obvious solution to this salt water intrusion problem is to construct a barrier across the river near its mouth. In planning such a salt water barrier across a navigable river, it was necessary to design a project which included a navigation lock to permit the passage of barges and other vessels which ply the Trinity River below Liberty.

For several years, public agencies and governmental bodies participated in the planning and design of this project so that it would enhance the environment and improve the economic and esthetic standards in the lower Trinity River Basin. The first public hearings on the proposed project were held in 1960 and because of certain objections concerning the location of a proposed wildlife refuge, the area of the project was reduced in size to satisfy those objections. The present reservoir site was approved and the project authorized by Congress in 1962. The first planning money was made available in Fiscal Year 1964 and the first construction funds were appropriated in 1966. During the 10-year period subsequent to authorization, this project was delayed by an administrative freeze on spending for reasons of national emergency. Then funds were released and the project reached the point where it was approximately 72% complete before construction was halted by the temporary injunction which is presently in force.

Suit was filed in the U. S. District Court at Houston, Texas, on September 13, 1971, by the Sierra Club and others to enjoin Wallisville Dam and the Trinity River Project. By order of February 26, 1973, the U. S. District Court granted the Sierra Club's Motion for Summary Judgment and enjoined construction on both projects until the Corps complied with the National Environmental Policy Act by filing proper Environmental Impact Statements.

The Fifth Circuit Court of Appeals reversed the District Court on August 26, 1974, with the following holdings:

1. Wallisville Dam and the Trinity River Project are separate projects.

2. The District Court erred in requiring guidelines for the Trinity River Project EIS, which was yet to be prepared and filed.

3. The Wallisville Dam EIS complied with the National Environmental Policy Act, except in its disclosures respecting population and industrial expansion and in its evaluations of certain other information and supporting data.

The injunction as to the Wallisville Dam was continued, pending review of a Supplemental EIS dealing with population and industrial expansion and with the indicated evaluations. The injunction as to the Trinity River Project was continued pending preparation, filing and review of the EIS, but in the meantime, planning and design could continue.

The Supplemental EIS for Wallisville Dam and the Original EIS for the Trinity River Project are now being prepared.

While this matter has been in Court, Congress has continued its support of the two projects. The Fifth Circuit recognized this by stating in its opinion:

> "The course of the Congressional hearings discloses that body continues to regard Wallisville as a project separate from the Trinity River Project. It also demonstrates that, with full knowledge of the detriments and benefits of the project, the state of completion, the outstanding injunction, and of the objections to further construction, Congress thought the Wallisville Project should receive contingent funding despite the Corps' withdrawal of its request therefor. While this Congressional action is not a considered, debated determination that the project should proceed notwithstanding environmental objections, cf. Environmental Defense Funds, Inc. v. Corps of Engineers, 492, F.2d 1123, p. 1141, 5 Cir., 1974, it does indicate that Congress wished to expedite the construction of this project, if and when it becomes possible, and to do so regardless of the outcome of litigation related to Trinity River Construction."

In 1971, the Trinity River Authority of Texas, under a contract with the City of Houston, completed the construction of a fresh water supply reservoir (Lake Livingston) at river mile 128 which covers approximately 90,000 acres of land and impounds 1,750,000 acre feet of water. The City of Houston owns 70% of the yield from this reservoir which was constructed at a cost of more than $74 million. The City of Houston has spent, or has obligated itself to spend, an additional sum in excess of $100 million for the construction of a system for the distribution of water from this reservoir which is to be released into the Trinity

River and diverted at a point in the upper reaches of the Wallisville Reservoir. The Livingston Reservoir was designed to operate in conjunction with the Wallisville Project for the purpose of providing a practical and economical means of distributing this fresh water into the Houston industrial complex. This investment of approximately $200 million of non-Federal funds will be in serious jeopardy if the Wallisville Project is not completed as now scheduled.

Completion of Wallisville Dam is a pressing, immediate need in order to complete the Lake Livingston-Lake Wallisville System. This system will provide the Houston-Galveston Bay area with surface water as an alternative to the present pumping of underground water and is intended to relieve the continuing subsidence of the area caused by such pumping. This subsidence is an ecological disaster which must be remedied with all possible speed.

We urge the Congress to continue its strong support for this project by directing the Corps of Engineers to retain the $3.6 million which has been previously appropriated.

II. We urge the Congress to include in the Fiscal Year 1982 budget $8,578,000.00 for the Galveston Harbor and Channel for operation and maintanance.

III. We urge the Congress to include in the Fiscal Year 1982 budget $720,000 for Galveston Bay Area Navigation for investigations.

IV. We urge the Congress to include in the Fiscal Year 1982 budget $10,216,000.00 for Gulf Intracoastal Waterway for operations and maintenance.

STATEMENT OF HOMER E. NAGEL, MAYOR, NEDERLAND, TEX.

This is to advise that the City of Nederland is situated in the Ninth Congressional District, Texas, and recommends your consideration of FY 1982 Budget appropriations for the following projects:

PROJECT	FY 1982 BUDGET
Neches River Salt Water Barrier (Advance Engineering & Design)	250,000
Sabine-Neches Waterway (Operation & Maintenance)	7,858,000
Taylors Bayou (Construction)	250,000*

In addition, we support the following improvements:

PROJECT	FY 1982 BUDGET
Clear Creek (Advance Engineering & Design)	300,000
Galveston Bay Area Navigation Study (Investigations)	720,000
Galveston Harbor & Channel (Operation & Maintenance)	8,578,000
Gulf Intracoastal Waterway (Operation & Maintenance)	10,216,000
Highland Bayou (Construction)	800,000
Houston Ship Channel (Operation & Maintenance)	5,656,000
Texas City & Vicinity Hurricane Protection (Construction)	2,800,000
Texas City Channel (Operation & Maintenance)	1,552,000
Texas City Channel Industrial Canal (Construction)	3,752,000
Dickinson Bayou (Investigations)	50,000
Pleasure Island at Port Arthur (Investigations)	65,000

*An amount higher than budget figure will be requested.

Your consideration of these recommendations is appreciated.

STATEMENTS OF MIKE HATTON, PRESIDENT, GREATER PORT ARTHUR (TEX.) CHAMBER OF COMMERCE

We, the Board of Directors of the Greater Port Arthur Chamber of Commerce, request your favorable consideration of the $10,216,000 appropriation for the operation and maintenance of the Gulf Intracoastal Waterway for the fiscal year 1982.

The Gulf Intracoastal Waterway of Texas is an indispensable link between area refineries, chemical and petrochemical plants, all of which are absolutely essential to the security as well as the economical well being of our Nation today.

Few, if any, waterways in America contribute more to the American economy, to our strengthened relations with a peaceful world, and toward achieving a better balance of trade than the Gulf Intracoastal Waterway of Texas.

We, therefore, respectfully request your favorable consideration of this $10,216,000 appropriation.

We, the Directors of the Greater Port Arthur Chamber of Commerce, request approval of the proposed $250,000 appropriation for Taylor Bayou Construction Project for fiscal year 1982.

This project dates back to 1946, and as you well know construction costs have soared since that time. We feel that this will benefit our community, not only from an economic standpoint but also from a drainage standpoint. It is essential that drainage protection be provided for our area.

Therefore, we respectfully urge your committee to approve funds proposed for the forthcoming fiscal year.

We, the Board of Directors of the Greater Port Arthur Chamber of Commerce, request approval of the $7,858,000 appropriation for the operation and maintenance of the Sabine-Neches Waterway for fiscal year 1982.

Our area is of significant importance to the Nation by the fact that over 11.3% of the Nation's refined petroleum products are transported through our complex of refineries. Today, refineries are relying more and more on larger and greater numbers of tankers to bring in vitally needed imported crude and to handle export and domestic shipments as well.

We respectfully request your favorable consideration to the request for $7,858,000 for the operation and maintenance of the Sabine-Neches Waterway for fiscal year 1982.

STATEMENT OF EMMETT F. LOWRY, MAYOR, TEXAS CITY, TEX.

On behalf of the City Commission and the citizens of Texas City, we sincerely request your support for adequate appropriations toward completing the remaining Texas City-LaMarque Hurricane Protection Levee; the Texas City Channel Industrial Canal Construction and the Texas City Channel Maintenance and Operation.

No action on the Texas City-LaMarque Hurricane Protection Project would nullify the benefits to be derived from the expenditures exceeding Forty Million Dollars to date spent by the Federal Government and by Galveston County. The entire multi-billion dollar petro-chemical complex, as well as our City of 40,000 persons and their families will be in danger of hurricane damage until the final completion of the "Texas City and Vicinity Hurricane Protection Construction" is completed. Therefore, it is for this reason we strongly recommend to the Committee authorization for the 1982 fiscal year appropriations.

The first phase of construction of the "Texas City Industrial Canal Construction" has begun and the additional appropriation recommended in the proposed budget is desperately needed. The completion of this project, along with the proposed funds for Operation and Maintenance of the Texas City Channel, are vital to the continuing operation of our petro-chemical industry, which processes products for the entire nation. These industries provide thousands of jobs for citizens throughout Galveston County and even in Brazoria and Harris Counties.

Residents of the Santa Fe-Hitchcock and Dickinson areas were flooded repeatedly in 1979 because of heavy rainfall and the lack of completion of the Highland Bayou Diversionary Canal and the need for expanding of Dickinson Bayou. We respectfully request your favorable consideration of funds needed for both of these projects to relieve the suffering and tremendous property losses of citizens of these areas of Galveston County.

Should you have any specific questions pertaining to these projects, we will be most willing to cooperate in providing any information we have available for the use of your Committee.

STATEMENT OF HARRY W. ROBINSON, MAYOR, HITCHCOCK, TEX.

Your consideration of continued federal funding of Highland Bayou (Construction) in the amount of $800,000 is hereby requested. Presently, the project is over 90% complete with contracts currently left to complete enlargement of the upper end of the channel and to install the diversionary dam. Completion of this project will significantly reduce flooding within the City of Hitchcock area.

The City of Hitchcock is concerned, as are all our constituents over economy in government, but the completion of the Highland Bayou project, after years of planning and with construction being over 90% complete, would be a justified cost to benefit ration of our tax dollars.

STATEMENT OF HON. JOHN TOWER, U.S. SENATOR FROM TEXAS

Mr. BROOKS. I see here the senior Senator from Texas, none other than the Terrible Tiger, John Tower. I have known him since he went to high school in Beaumont. I knew his daddy, his mama, and he has always supported—I will say this, they may say Tiger is against everything, but not the projects in the Ninth Congressional District—and I want to thank you publicly for your previous help and for that which we hope to get in the near future.

Love and kisses, your friend.

Senator TOWER. I think it would be appropriate to note Jack Brooks and I went to the same high school and had the same teachers. I guess that is why Jack is so brilliant.

Senator SASSER. May I inquire, Have you voted?

Senator TOWER. I have. Do you want me to give my testimony? I know you don't want to miss it.

Senator SASSER. I do not want to miss it. I always find your testimony to be very interesting. What I will do, Senator Tower, is read the record with great care when it comes out so I will have access to your testimony. But I will say to you that these projects have been so eloquently described here today that I have decided I am going to be either for these projects or against them, whichever will help them most. [Applause.]

I do want to welcome you, Senator Tower, and if you would excuse me, while I go vote, I will be back just as quickly as I can.

[A brief recess was taken.]

Senator TOWER. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before the Energy and Water Development Subcommittee of the Senate Committee on Appropriations to speak in regard to various public works projects which are located in the State of Texas.

For the first time in my tenure in the U.S. Senate, I am only requesting your favorable consideration of appropriations for public works projects in Texas which have been sanctioned by the President. This is in response to President Reagan's request for our support in helping the administration realize the goals which all of us share for economic recovery. While there are numerous projects which I have supported in the past 20 years, I am only speaking in favor of those which the administration and I feel will serve Texas to its best.

While the population, industry, and agricultural capabilities of Texas are constantly expanding, natural water supplies are not. The future of Texas' economic growth appears unlimited at this time, but only if the demand for this scarce commodity is not ignored.

Even though Texas has vast natural resources, she is not capable of supplying this basic need naturally. If we are to continue our high levels of production, we must be assured of reliable and adequate water supplies. Since this problem cannot solve itself, I request that as the committee considers the projects presented today, they keep in mind the enormous needs of our State.

I wish to speak briefly of some of the projects which I think deserve special attention by your committee, Mr. Chairman. I support these projects, and while time does not permit me to discuss each in detail, I would like to draw your attention to the fact that each of these projects has passed certain criteria upon which this testimony is founded.

First, they have all been proven cost effective by the Corps of Engineers. That is, the Federal Government's benefits will outweigh the costs invested in each project during its lifetime.

Second, the impact on our environment has been kept to a minimum since each must comply with provisions of the National Environmental Policy Act, the Federal Water Pollution Control Act, the Fish and Wildlife Coordination Act, the Endangered Species Act, and numerous other statutes designed to preserve the environment. I feel the combination of environmental and economic factors in each project has been well balanced.

Mr. Chairman, asking that you keep in mind the unprecedented growth and development my State is experiencing and has experienced in the last decade, I would like now to mention some of the projects that are becoming even more vital to the continued welfare of Texas and her people.

To begin, there are the projects in the Brazos River basin, which include $1.780,000 for the continued construction of the San Gabriel River project; $250,000 for general investigation of the Brazos natural salt pollution control project; and $290,000 for advance engineering and design for Lake Millican. I also ask your approval of the $16.2 million in the President's budget for construction of Lake Aquilla and $300,000 for the Brazos River and tributaries study.

For the Corpus Christi ship channel, I ask your approval of $3.6 million needed to construct the 45-foot project and $3,656,000 for operation and maintenance of the channel.

Third, may I mention the Trinity River projects. These are $570,000 for general design and $975,000 for operation and maintenance of the Trinity River and its tributaries; $37.2 million for construction on Lakeview Lake; and $12.5 million for construction of Ray Roberts Lake.

At this time, I reiterate my previous requests to the Corps of Engineers' Southwestern Division concerning their environmental studies of Wallisville Lake; these studies should be finished and presented to the courts so further costly delays on this project can be avoided.

Fourth, Texas has several projects in the Houston-Galveston area in need of funding. These include $100,000 for study of the San Jacinto River and its tributaries and $800,000 for continued investigation of Buffalo Bayou and its tributaries' flood problems.

The financial and physical devastation caused by flooding of these areas increases in severity each year due to the heavy urban growth and demand for additional housing in the Houston area.

I support $10,216,000 for operation and maintenance of the Gulf Intercoastal Waterway; $300,000 for advanced engineering and design for Clear Creek; $720,000 for study of the Galveston Bay area navigation study; $450,000 for construction at Vince and Little Vince Bayous; and $800,000 for Highland Bayou construction.

Additionally, there are $4,111,000 for operation and maintenance at Addicks and Barker Reservoirs and $3,656,000 for operation and maintenance of the Houston ship channel.

And finally, I ask you to consider the Red River basin projects, which include $11.9 million for construction of the Arkansas/Red River basin chloride control; $100,000 for completion of construction plans for Holliday Creek; and $650,000 for construction at Cooper Lake. I was pleased to learn that the Corps' environmental impact study on Cooper Lake has been revised for review by the courts. Making further work on this vital project possible in the near future.

Mr. Chairman and members of the subcommittee, I thank you again for this opportunity to share the needs of Texas with you and ask that you give each of these projects your careful consideration.

Senator STENNIS [presiding]. Thank you, Senator, for your testimony. I am sorry I was late to this hearing, but thank you for your fine testimony.

And you are Mr. Miller.

Mr. MILLER. Yes, sir.

Senator STENNIS. Are other witnesses here?

We better have a little understanding. I am sorry things are the way they are, but we can't control that. We must move along and be as brief as possible. We just have to do the best you can. I was due to be over there when the hearing started and just couldn't get there.

So, you go ahead, Mr. Miller. You know it is necessary for all of us to cooperate timewise.

GULF INTRACOASTAL WATERWAY

STATEMENT OF DALE MILLER, PRESIDENT, GULF INTRACOASTAL CANAL ASSOCIATION

Mr. MILLER. I understand. My name is Dale Miller and I am president of the Gulf Intracoastal Canal Association. It is an organization under the auspices of the Gulf Intracoastal Waterway System that extends from the Mexican border across the five gulf States to the west tip of Florida.

Senator STENNIS. Where was that?

Mr. MILLER. To the west coast of Florida. And it is a complex waterway system, a system not only of a million channels but as many shallow deeper draft ports and tributary channels.

Many of those projects are represented by well-informed witnesses before you in these hearings so I shall not encumber the record with any repetitious testimony.

So, I will simply submit my testimony for the record, Senator, and invite your consideration of it, and that will conclude my oral testimony, except to say that I want to associate myself with the remarks of the Trinity River group that will appear before you shortly, and, too, with the testimony of Mr. Harry Plomarity, director of the Port of Corpus Christi, who is here beside me and scheduled to follow me.

Senator Stennis. Thank you, Mr. Miller.

[The statement follows:]

STATEMENT OF DALE MILLER, PRESIDENT, GULF INTRACOASTAL CANAL ASSOCIATION

My name is Dale Miller, and I am President of the Gulf Intracoastal Canal Association, with principal offices in Houston. It is my privilege to appear before you again today, as I have each year for a considerable period of time, to recommend the appropriation of adequate funds to continue the improvement and efficient operation of the Gulf Intracoastal Waterway system, and related shallow-draft and deep-draft projects along the Gulf Coast and into the hinterlands. A number of these projects are being represented by well-informed witnesses during the course of your hearings, and I shall not encumber the record with repetitious testimony. It will be my function to depict briefly a broader picture of this impressive navigation development along the Gulf Coast.

Our Gulf Intracoastal Canal Association was organized in 1905, nearly 76 years ago, and through the years it has cooperated actively with Congress and Government agencies in the creation of the Gulf Intracoastal Waterway system, a complex of navigation facilities which has come to be regarded as the most remarkable artery of transportation in America. It has achieved by far the highest ratio of benefits to costs of any waterway in the nation -- or of any other form of transportation. Its annual commerce of approximately 100,000,000 tons exceeds by twenty times the figure of 5,000,000 tons which was originally predicted for it when it was authorized. It is a noteworthy fact that this Canal returns each year more than $26 in savings in transportation costs for every dollar expended by the Federal Government in its construction, maintenance, and operation.

I am aware that these facts are known to many members of this Subcommittee, who have been close to this subject for years; but I review them briefly here to place in proper perspective my appearance before you in behalf of adequate appropriations to perpetuate the worthwhile service being performed by the Intracoastal Canal and related navigation projects. I have no hesitancy in asserting that their record of service in the past fully justifies your favorable consideration of their needs today.

In submitting for your consideration these meritorious projects along the Gulf Coast, we conform our recommendations to criteria which we think are sound, these criteria having been established by findings of responsible officers of the Corps of Engineers as to the amount of funds which can be economically expended during the year. While recommendations of the Office of Management and Budget reflect such criteria in some instances, they fail to do so in many cases, and we respectfully suggest that the more reliable guide to a realistic civil works program is provided by the ability of the Corps to prosecute its work on a sound basis.

With respect to the Gulf Intracoastal Waterway itself, our most important objective in the future will be the deepening and widening of the main channel to accommodate its rapidly growing commerce. Congress has already authorized new dimensions for the busy central segment between New Orleans and Houston, with increases from 12 to 16 feet in depth and from 125 to 150 and 200 feet in width. We are confident that the Subcommittee shares our awareness of the importance of this authorized project, but we do not request funds to initiate construction at the present time, since local problems have not yet been resolved. Inasmuch as the project spans a distance of 350 miles, problems of rights-of-way and pipeline relocations are of course formidable, but we intend to have them resolved, and our request just now is only that the Subcommittee keep in mind the importance of this undertaking until such time that we seek funds to get construction underway.

Meanwhile, however, it is a notable fact that during the period since those new dimensions were authorized in 1966 the commerce moving over the Waterway has more than doubled. In other words, if Congress found it necessary to authorize a considerable deepening and widening when the traffic was less than half of what it is today, what might be said of its actual requirements now? For this reason, we secured authority from Congress to empower the Corps of Engineers to up-date those studies which led to that authorization -- to determine if present conditions do not in fact require still greater dimensions. We recommend that the Subcommittee provide whatever funds may be required by the Corps of Engineers to bring this important investigation to an expeditious conclusion.

Virtually all navigation projects on the Gulf Coast -- both deep-draft and shallow-draft channels -- either coindide with, or are tributary to, the Gulf Intracoastal Waterway, and for this reason our Association has a vital interest in their development and improvement. Accordingly, we earnestly request the Subcommittee to give favorable consideration to the needs of all such projects.

One of the most important objectives of the Gulf Intracoastal Canal Association is the extension of navigation into the hinterlands through the development of principal tributaries. Of major importance in the eastern Gulf is the Tennessee-Tombigbee, the construction of which should be expedited. Of comparable importance in the western Gulf is the Trinity River in Texas. Despite a number of problems that have been encountered in some areas of the watershed, we believe the project remains viable for navigation to a considerable distance inland.

As important as tributary streams into the hinterlands, however, are access channels outward to the Gulf, especially in view of the increasing activity in offshore petroleum development. Improvement of existing facilities, and construction of new channels as required, will be essential to this development -- as will be increased dimensions for progressive Gulf Coast ports. The Gulf Intracoastal Waterway will be a vital part of all this activity, and our Association urges the Appropriations Subcommittees to be promptly responsive to such needs.

Of significance to our long-range program are two projects in Florida. One is the Cross-Florida Barge Canal, a project designed to connect the Gulf and Atlantic inland waterways into a continuous navigation facility extending from the Mexican border to the northeastern area of the United States. We deplore the arbitrary action of the Administration in 1971 in halting construction of this project -- on which more than fifty million dollars had been expended to bring it to one-third completion -- but it remains our conviction that it is needed, and we are hopeful of its eventual re-consideration. The other project is the extension of the Gulf Intracoastal Waterway from St. Marks to Tampa Bay -- the missing link in a protected inland navigation channel which otherwise extends along the entire Gulf. This key project should be constructed in order to complete the system.

Funds for general investigations, and advance engineering and design, are as important as funds for construction, for without adequate appropriations in those categories a realistic and beneficial public works program cannot be perpetuated. Sufficient funds for rehabilitation work should likewise be supplied when required, in order that the system may operate at its maximum efficiency. In particular, the 110-feet wide replacement lock at Vermilion, Louisiana, is badly needed, and its construction should be expedited.

Although requests for construction funds are customarily accorded the greatest emphasis in these hearings, I would like to stress also the over-riding importance of appropriations for maintenance. Insufficient funds for maintenance have many times reduced the service rendered by existing rivers and harbors projects, with a resultant loss in the benefits which became available upon their completion.

I appreciate the opportunity to appear before you today in support of our Association's program, which, succinctly stated, is to promote the economic growth and development of the Gulf Coast through low-cost water transportation.

CORPUS CHRISTI SHIP CHANNEL

STATEMENT OF HARRY PLOMARITY, PORT DIRECTOR, PORT OF CORPUS CHRISTI

ACCOMPANIED BY DUANE ORR, SPECIAL CONSULTANT

Senator STENNIS. All right, Mr. Plomarity.

Mr. PLOMARITY. Senator Stennis, my name is Harry Plomarity, and with me today is Mr. Duane Orr seated behind me, special consultant.

We appear before you today requesting that the 97th Congress appropriate the following funds for fiscal year 1982.

To continue work on the Corpus Christi ship channel in accordance with the authorized 45-foot project, $3.6 million, and for the continued operation and maintenance of the Corpus Christi channel project, $6.656 million.

The Port of Corpus Christi is ranked among the top 10 ports in the Nation in waterborne commerce and is recognized as a major port, both in Texas and in the Nation. The Federal Energy Administration in a letter to the Chief of Engineering also recognized Corpus Christi as a potential national energy facility because of the major energy facilities which the port serves. Waterborne commerce in 1980 totaled 53.5 million tons which, because of general economic conditions, failed to exceed the 60.8 million tons which the port handled during the previous year.

Waterborne commerce and traffic statistics which are included in the detailed statement which has been submitted to the subcommittee indicates ample justification for all past project expenditures. However, future growth of the port is dependent upon continued congressional funding. We therefore urge that the fund requested be authorized by the 97th Congress for the fiscal year 1982.

Thank you.

Senator STENNIS. Thank you gentlemen, thank you very much, both of you. I note in one of your statements here, let me emphasize this, quoting:

> It has achieved by far the highest ratio of benefits to costs of any waterway in the Nation, or of any other form of transportation. Its annual commerce of approximately 100 million tons exceeds by 20 times the figure of 5 million tons which was originally predicted for it when it was authorized.

Mr. MILLER. Yes, sir, that is true, Senator.

Senator STENNIS. Well, that is a great American success story. I congratulate you gentlemen. I am proud of it with you.

I am glad to have this information. We have a backlog of needs for our ports throughout the country. We are going to do something about it. It has been pushed back for other things lately. We will keep pushing, gentlemen.

[The statement follows:]

Statement of Harry G. Plomarity, Port Director, Port of Corpus Christi, Tex.

My name is Harry Plomarity and I am Port Director for the PORT OF CORPUS CHRISTI, Texas (Official name - Nueces County Navigation District No. 1), in whose District the federally authorized CORPUS CHRISTI SHIP CHANNEL, TEXAS PROJECT is located.

REQUEST FOR FUNDS

I appear before you today requesting that the 97th Congress, 1st Session, appropriate the following funds for FY82:

A. CONSTRUCTION OF AUTHORIZED IMPROVEMENTS

$3,600,000 to continue work on the CORPUS CHRISTI SHIP CHANNEL in accordance with the authorized 45-foot Project (Senate Document No. 99 - Public Law 90 - 483 dated August 13, 1968).

B. OPERATION AND MAINTENANCE OF THE WATERWAY

$6,656,000 for the continued operation and maintenance of the CORPUS CHRISTI CHANNEL PROJECT during FY82.

UNCOMPLETED IMPROVEMENTS TO THE CORPUS CHRISTI SHIP CHANNEL

The following authorized improvements are yet to be completed:

1. Deepening the Corpus Christi Inner Harbor from Beacon 82 (Mile 21.90) outside the Corpus Christi Harbor Bridge to and including the Viola Turning Basin (Mile 31.60) from the existing 40 foot depth to the authorized 45 foot depth.

2. Widening the Tule Lake and Viola Channels from the present 200 foot bottom width to the authorized 300 foot bottom width.

3. Enlarging the Chemical, Tule Lake and Viola Turning Basins to provide a minimum turning diameter of 1,200 feet.

Completing the construction of three lay berths near Port Ingleside, and adding three (3) additional berths.

STATUS OF AUTHORIZED IMPROVEMENTS TO THE CORPUS CHRISTI SHIP CHANNEL

All authorized improvements to the Corpus Christi Ship Channel prior to the 90th Congress, 2nd Session, are essentially complete. Table No. I below shows the existing and authorized project dimensions.

DESCRIPTION OF ACTIVITIES AND PLANNING IN PROGRESS

1. Dredging of the Inner Harbor - 45 foot Project

Completion of the authorized 45 foot Corpus Christi Ship Channel Project is awaiting the Corps' development of an acceptable disposal plan for the dredged material and appropriate mitigation measures to satisfy the environmental agencies. The Corps, after having its July 1975 plan termed unacceptable by the environmental agencies, began developing a plan to use upland farmland as disposal sites for the shoaling that would be removed from the Inner Harbor during the next 50 years. From a Corps' scoping meeting held early in 1980, the landowners learned of the plan to use farmland on the north shore of Nueces Bay as disposal sites for containing the virgin material excavated from the channels and basins while increasing the depth of the Inner Harbor from

40 to 45 feet and afterwards for maintaining the Inner Harbor for a period of 50 years.

TABLE NO 1
CORPUS CHRISTI SHIP CHANNEL
Existing and Authorized Waterway Dimensions
(As of April 1, 1980)

Section of Waterway	Existing Dimensions (in feet)		Authorized Dimensions (in feet)	
	Depth M.L.T.	Bottom Width	Depth M.L.T.	Bottom Width
Outer Bar Channel	x	x	47	700
Jetty Channel:				
Outer end	x	x	47 to 45	700 to 600
Between Jetties	x	x	45	600
Inner Basin at Harbor Island	x	x	45	730 to 1720
Inner Basin to Ferry Landing at Port Aransas	x	x	45	600
Port Aransas to La Quinta Channel Junction	x	x	45	500
Mooring Area-Port Ingleside	x	x	45	150
La Quinta Channel Junction	x	x		
To Corpus Christi	x	x	45	400
La Quinta Channel	x	x	45	300
La Quinta Turning Basin	x	x	45	800x1200
Corpus Christi Turning Basin	40	1000	45	800
Industrial Canal	40	400	45	400
Avery Point Turning Basin	40	1000	45	975x1050
Tule Lake Channel (Avery Point to Chemical Turning Basin)	40	350	45	400 min.
Chemical Turning Basin	40	920 dia.	45	1200 dia.
Tule Lake Channel (Chemical Basin to Tule Lake Basin)	40	200	45	300
Tule Lake Turning Basin	40	900	45	1000x1200
Viola Channel (Tule Lake Basin to Viola Basin)	40	200	45	300
Viola Turning Basin	40	700to900	45	1200 dia.

x Waterway completed to authorized dimensions

The farming interests immediately contacted the Secretary of Agriculture, Senators Tower and Bentsen and Representative Wyatt expressing strong opposition to the use of prime farmlands as sites for disposing of the dredged material from the Project.

As a result of these concerns, the two Senators and Congressman from this area called a meeting in Austin, Texas, on July 29, 1980, and all Federal agencies involved in the decision making on this Project were invited to attend. At this meeting it was agreed that the agencies would cooperate in developing an acceptable disposal plan by July, 1981, to accommodate all of the dredged material that is expected to be generated during the next 50 years. It was also agreed that the Corps of Engineers would be the lead agency.

If this schedule is to be met, the Corps must have a plan ready to present at a public hearing planned shortly after July, 1981. In general, the plan being developed is to use part of Nueces Bay as the primary disposal site in conjunction with a limited number of smaller upland sites for containing the estimated 86 million cubic yards of dredged material that is projected for the next 50 years. In addition, the Corps is planning to undertake mitigation measures in the Nueces River delta area to compensate for the water bottoms in Nueces Bay that are filled with dredge material. With an approved disposal plan, the time of completion of the 45 foot Project to serve the many industries located in the Inner Harbor is a direct function of the funding provided by Congress.

Under the 45 foot Project authorization, six breasting structures have been constructed to accommodate 3 ships, but 10 mooring structures are needed before vessels can be safely moored at these lay berths. A contract for construction of the needed mooring structures is scheduled to be awarded during FY82.

For continuing work on the authorized project, we support the President's recommended appropriation of $3,600,000 for FY82.

2. Operation and Maintenance of the Ship Channel

Environmental objections to the Corps' plan for disposal of the dredged material from the Inner Harbor prevented any maintenance dredging from being accomplished between 1971 and January, 1980. As a result of the shoaling, it was necessary to reduce the maximum allowable draft for ships entering and leaving the Harbor. It was not until March 2, 1980, that the most seriously shoaled section of the Inner Harbor (Corpus Christi Turning Basin) between mile 21.90 and mile 23.80 was restored to a 40 foot depth. However, shoaling in other reaches of the Inner Harbor beyond the limits of the initial dredging contract has precluded any increase in the loaded draft. The present restoration dredging contract to a depth of 40 feet in the undredged reach of the Inner Harbor began in mid-1980 and is projected to be completed in May, 1981. Until the present maintenance dredging contract is finally completed, the current draft restrictions cannot be lifted.

These draft restrictions are the result of the delays experienced by the Corps in maintaining the Inner Harbor since 1973 when maintenance dredging was originally scheduled. At that time, the Corps' plan was to undertake both maintenance dredging and the authorized deepening simultaneously. Because of objections by environmentalists and certain governmental agencies to the Corps of Engineers' disposal plan for maintaining and deepening the Inner Harbor, the Corps was unable to proceed with its originally scheduled program. Neither the lands nor the funds were available to satisfy the environmentalists' demands that upland sites be acquired to contain the dredged material.

For FY82 the Corps has indicated an engineering capability of $6,656,000, which is $3,000,000 in excess of the President's recommended appropriation of $3,656,000. These additional funds are needed to restore the channel across Corpus Christi Bay from the LaQuinta junction to Beacon 82 outside the Inner Harbor to Project depth. Presently, the controlling depth of this reach of the channel is 40 feet, but before FY83 the depth is likely to be 38 feet or less and will be controlling the draft that ships can enter and leave the Port of Corpus Christi Inner Harbor. It is the Port's view that most of the shoaling in this open reach of Corpus Christi Bay is attributable to Hurricane Allen, which washed over Mustang Island and north Padre Island carrying the sand from these islands into the deepest part of Corpus Christi Bay which was the ship channel.

For this reason, we request that Congress consider this unusual shoaling to have been caused by Hurricane Allen and that the required appropriation of $3,000,000 to restore the channel to Project depth be considered as part of the hurricane damage to South Texas Waterways.

We urgently request that $6,656,000, which is the Corps' capability for FY82, be appropriated to expedite removal of the shoaling in the Corpus Christi Bay reach of the channel which was caused by Hurricane Allen and for other routine operations and maintenance of the Corpus Christi Ship Channel.

3. Review Report on Requested Modifications to the Corpus Christi Ship Channel

Preparation of the review report by the Corps of Engineers on requested modifications to the Corpus Christi Ship Channel Project pursuant to the House Public Works Committee resolution adopted September 19, 1972, continues with a draft report expected to be completed in the near future. Additional study funds are not being requested by the Corps.

COMPARISON OF FEDERAL AND NON-FEDERAL EXPENDITURES IN DEVELOPING AND MAINTAINING THE CORPUS CHRISTI SHIP CHANNEL

Federal expenditures and appropriations authorized by Congress for the Corpus Christi Ship Channel project for new work dredging and rehabilitation between FY61 and FY81 totals $31,307,772. Operation and maintenance expenditures for the same period totals $46,037,241 which includes $11,464,500 that the Corps of Engineers recently spent in removing part of the shoaling in the waterways as a result of Hurricane Allen.

By comparison non-Federal expenditures for dredging, dock construction and ancillary facilities along the Corpus Christi Ship Channel during the 20 year period 1962 to 1980, inclusive, totaled $18,982,549 for dredging and $83,364,388 for docks and ancillary facilities, for a total expenditure of $102,346,937. During this period non-Federal waterway related expenditures exceeded Federal expenditures by thirty-five (35%) percent.

JUSTIFICATION FOR CONGRESS APPROPRIATING FUNDS

The **PORT OF CORPUS CHRISTI**, the second largest port in Texas, and ranked among the top ten ports in the Nation in waterborne commerce is recognized as a major port, both in Texas and in the Nation. The Federal Energy Administration (now DOE) in a letter to the Chief of Engineers also recognized Corpus Christi as a potential National energy facility because of the major energy facilities which the Port serves. Waterborne commerce in 1980 totaled 53,506,420 tons, which, because of general economic conditions, failed to exceed the 60,846,785 tons which the Port handled during the previous year.

Table No. III on the following page shows annual waterborne commerce and traffic that the Port of Corpus Christi has accommodated during the past ten (10) years.

SUMMARY: Waterborne commerce and traffic statistics above indicates ample justification for all past project expenditures. However, future growth of the Port is dependent upon continued Congressional funding.

During the past 20 years (FY61 to FY81) non-Federal port related expenditures totaled $102,346,937 as compared to Federal expenditures of $77,345,013. These Federal expenditures include recent extraordinary expenditures in FY81 of $11.5 Million for removing shoaling caused by Hurricane Allen. The significant point is that non-Federal expenditures have exceeded Federal expenditures by 35 percent.

Because of the importance of the **PORT OF CORPUS CHRISTI** to the Nation's international trade, we cannot concur with any cost sharing waterway funding program that requires large contributions by non-Federal interests.

TABLE NO. III

ANNUAL WATERBORNE COMMERCE AND TRAFFIC ON THE CORPUS CHRISTI SHIP CHANNEL

	Total Waterborne Commerce & Traffice			Corpus Christi Waterborne Commerce & Traffic		
	Commerce (S. Tons)		(2)	Commerce (S. Tons)		
	U.S. Corps of Engineers (3)	Port of Corpus Christi (1)(2)	Total Vessel Traffic (one-way only)	U.S. Corps of Engineers	Port of Corpus Christi (1)(2)	(2) Corpus Christi Traffic (one-way only)
1971	26,745,888	26,860,235	4847	21,776,171	23,137,014	4669
1972	25,496,084	26,167,081	5772	22,300,918	22,678,577	5100
1973	(A) 27,171,559	30,031,968	5696	(A) 24,794,711	27,015,499	5227
1974	(A) 35,645,004	40,896,346	8014	(A) 30,708,518	35,451,188	6443
1975	(A) 41,290,771	44,606,135	7606	(A) 35,487,454	37,945,544	5500
1976	43,492,959	48,293,793	7033	38,558,753	43,432,049	4782
1977	56,041,113	60,669,825	(B) 5446	46,732,810	53,705,517	(B) 4761
1978	54,678,296	61,246,725	(B) 6500	46,554,601	54,611,337	(B) 5529
1979	*	60,846,745	(B) 6991	*	54,121,877	(B) 6168
1980	*	53,506 420	(B) 7408	*	48,802,788	(B) 5297

*Not Available

(1) Statistics of Port of Corpus Christi (Nueces County Navigation District No. 1 – NCND). NCND records are maintained slightly differently from those by the Corps of Engineers.

(2) Corpus Christi commerce and traffic includes the Corpus Christi Inner Harbor, Port Ingleside and LaQuinta Channel. Harbor Island commerce and traffic are not shown separately, but are included in the total waterborne commerce.

(3) Certain military cargoes and bunkers are excluded from the Corps statistics. However, the Port includes all cargo and bunkers moving across the docks as ships cargo, but bunkers loaded onboard a ship from barges are counted as barge cargo. The Port of Corpus Christi statistics are based upon actual records of shippers and receivers of cargo.

(A) From 1973 to 1975 the Bureau of the Census failed to report most of the imported bauxite ore.

(B) For 1977, 1978, 1979 and 1980 each barge is counted separately, but the tug handling the tow is not counted.

Respectfully submitted

Trinity River Project, Texas

STATEMENT OF AMON G. CARTER, JR., CHAIRMAN, TRINITY IMPROVEMENT ASSOCIATION

Senator Stennis. All right, next we have Mr. Amon Carter, chairman of the board, Trinity Improvements Association, Trinity River basin project. I know that Trinity River, I have heard it before. I have been on it.

Mr. Vance, come on up to the table, we will have a reunion here.

All right, gentlemen, we are ready. This does not reduce the importance of your project.

Mr. Carter. Mr. Chairman, my name is Amon Carter of Fort Worth, Tex.

I am chairman of the board of the Trinity Improvement Association. This is a basinwide organization of citizens who are dedicated to the wise use and development of the water and soil resources in the Trinity River basin of Texas. By occupation, I am publisher of the Fort Worth Star Telegram.

Today, it is my privilege to act as spokesman for a delegation of 47 people appearing before you in support of the vital water resource programs in the Trinity River basin and to coordinate the brief oral testimony to be given by representatives of this diverse, but united, group.

Senator STENNIS. For the day, 47 people?

Mr. CARTER. Yes, sir. Everybody paid their own way.

The development of surface water resources within the Trinity basin has had dramatic influence on our economy and lifestyles. It is my opinion that Federal water projects have proven to be among the highest yielding investments ever made within our watershed and I commend this body for its historic support.

In recent years, the explosive population growth and expanding industrial base of Texas has placed tremendous demands on our existing water supplies. There will be yet more needs for water as the lignite deposits in the mid-Trinity basin are opened up to help satisfy the Nation's energy needs. The task of providing for our increasing needs grows more acute by the year and we again request this committee's support for the projects and studies to be mentioned in the statements that will follow my comments.

We are extremely grateful for the time this committee has allotted to us for this presentation. Also, we appreciate the job you have done—in the face of mounting obstacles—for the advancement of water programs that have proven their economic and environmental soundness.

Mr. Chairman, I wish to submit for the record a summary of our request, a complete list of this delegation appearing here today, copies of the testimony to be given by our group, and copies of supporting resolutions from their governing bodies.

Again, we appreciate this opportunity to appear before this committee and urge your favorable consideration of our requests.

I would like to call on a few members of the delegation who will discuss projects of specific interest.

Senator STENNIS. That is a fine statement and I commend all of you for your interest.

[The information follows:]

SUMMARY OF REQUESTS

THE TRINITY IMPROVEMENT ASSOCIATION (TIA) REQUESTS THE FOLLOWING ACTIONS BE TAKEN BY THE UNITED STATES CONGRESS WITH REGARD TO THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL FOR FEDERAL FISCAL YEAR 1982 AS THAT BILL RELATES TO PROJECTS OF THE CORPS OF ENGINEERS IN TEXAS.

1. FUNDING REQUESTS:

PROJECT	BUDGET REQUEST
ADVANCE ENGINEERING AND DESIGN	
TRINITY RIVER, TEXAS (DALLAS FLOODWAY EXTENSION & NAVIGATION TO LIBERTY)	570,000
CONSTRUCTION	
COOPER LAKE AND CHANNELS	650,000
LAKEVIEW LAKE	37,200,000
LAVON LAKE MODIFICATION AND EAST FORK CHANNEL IMPROVEMENT	2,413,000
LEWISVILLE DAM (REHAB)	2,818,000
RAY ROBERTS LAKE	12,500,000
OPERATION & MAINTENANCE	
BARDWELL LAKE	650,000
GRAPEVINE LAKE	1,213,000
LAVON LAKE	1,381,000
LEWISVILLE DAM	1,512,000
NAVARROMILLS LAKE	745,000
TRINITY RIVER & TRIBUTARIES	978,000

2. ADMINISTRATIVE REQUEST:

TIA REQUESTS THAT THE COMMITTEE REPORT CONTAIN LANGUAGE DIRECTING THE CORPS OF ENGINEERS TO COMPLETE THEIR INTERNAL REVIEW OF A REVISED ENVIRONMENTAL IMPACT STATEMENT (EIS) AND POST AUTHORIZATION CHANGE REPORT (PACR) ON THE WALLISVILLE RESERVOIR AND SALTWATER BARRIER AT THE EARLIEST POSSIBLE TIME.

SUMMARY OF REQUESTS

THE TRINITY RIVER AUTHORITY OF TEXAS (TRA) REQUESTS THE FOLLOWING ACTIONS BE TAKEN BY THE UNITED STATES CONGRESS WITH REGARD TO THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL FOR FEDERAL FISCAL YEAR 1982 AS THAT BILL RELATES TO PROJECTS OF THE CORPS OF ENGINEERS IN THE TRINITY RIVER BASIN, TEXAS.

1. FUNDING REQUESTS:

PROJECT	-BUDGET REQUEST
ADVANCE ENGINEERING AND DESIGN	
TRINITY RIVER, TEXAS (DALLAS FLOODWAY EXTENSION & NAVIGATION TO LIBERTY)	$ 570,000
CONSTRUCTION	
LAKEVIEW LAKE	$37,200,000
OPERATION & MAINTENANCE	
BARDWELL LAKE	$ 650,000
NAVARRO MILLS LAKE	745,000
TRINITY RIVER & TRIBUTARIES	978,000

2. ADMINISTRATIVE REQUEST: TRA REQUESTS THAT THE COMMITTEE REPORT CONTAINS LANGUAGE DIRECTING THE CORPS OF ENGINEERS TO COMPLETE THEIR INTERNAL REVIEW OF A REVISED ENVIRONMENTAL IMPACT STATEMENT (EIS) AND POST AUTHORIZATION CHANGE REPORT (PACR) ON THE WALLISIVLLE RESERVOIR AND SALTWATER BARRIER AT THE EARLIEST POSSIBLE TIME.

POSITION PAPER OF OAK CLIFF (TEX.) CHAMBER OF COMMERCE

In conjunction with the attached Resolution, dated February 12, 1974 and the Re-confirmation, dated May 20, 1975, the Board of Directors, Oak Cliff Chamber of Commerce submits this "Position Paper".

The Board of Directors urges that $37.2 Million Dollars be appropriated as recommended by the Army Corps of Engineers in the 1982 fiscal year budget for the continuation of construction of Lakeview Lake, to supplement appropriations of budgets for fiscal years 1975 and 1976.

STATEMENT OF RICHARD TALIAFERRO, MAYOR PRO TEM, DENTON, TEX.

MY NAME IS RICHARD TALIAFERRO AND I AM THE MAYOR PRO TEM OF THE CITY OF DENTON, TEXAS. I WANT TO EXTEND MY APPRECIATION FOR THIS OPPORTUNITY TO APPEAR BEFORE YOU REGARDING THE RAY ROBERTS RESERVOIR THAT IS BEING CONSTRUCTED NEAR DENTON. THE CITY OF DENTON JOINS THE CITY OF DALLAS IN EXPRESSING APPRECIATION FOR THE PROGRESS THAT HAS BEEN MADE ON THIS MOST IMPORTANT WATER RESOURCE PROJECT TO DATE. THE CITY OF DENTON, A 26% PARTICIPANT IN THIS RESERVOIR, IS IN VITAL NEED OF A NEW WATER RESOURCE. DENTON'S PRESENT WATER USAGE IS IN EXCESS OF NINE MILLION GALLONS PER DAY, WHEREAS THE CITY'S WATER RIGHTS FROM OTHER SOURCES AMOUNT TO FOUR AND A HALF MILLION GALLONS PER DAY. ALTHOUGH WATER IS AVAILABLE TO DENTON ON AN INTERIM BASIS FROM THE CITY OF DALLAS, IT IS OF UTMOST IMPORTANCE TO DENTON AND OTHER CITIES IN NORTH TEXAS THAT RAY ROBERTS RESERVOIR BE COMPLETED IN AS TIMELY A MANNER AS POSSIBLE.

IT IS MY UNDERSTANDING THAT THE PRESIDENT'S PROPOSED BUDGET FOR 1981-82 INCLUDES $12 1/2 MILLION DOLLARS FOR THIS PROJECT. IT IS ALSO MY UNDERSTANDING THAT TO MAINTAIN THE PREVIOUSLY ESTABLISHED SCHEDULE, $30 MILLION IS REQUIRED AND THAT THE CORPS OF ENGINEERS HAS A CAPABILITY OF COMPLETING THIS AMOUNT OF WORK. THE PROPOSED REDUCTION HAS THE EFFECT OF LENGTHENING THE CONSTRUCTION SCHEDULE OF THIS MOST VITAL PROJECT. WE CAN HARDLY SEE HOW THE COST OF THE PROJECT WILL BE REDUCED BY LENGTHENING THE CONSTRUCTION SCHEDULE.

GENTLEMEN, IT APPEARS TO ME THAT THE MOST PRUDENT COURSE TO FOLLOW WOULD BE ONE THAT WOULD MAINTAIN THE CONSTRUCTION OF RAY ROBERTS RESERVOIR AT ITS PREVIOUSLY ESTABLISHED SCHEDULE, THEREBY ALLOWING THE EARLIEST POSSIBLE COMPLETION DATE. UPON COMPLETION, THE CITY OF DENTON AND THE CITY OF DALLAS WILL BEGIN REPAYING THE FEDERAL GOVERNMENT, THEREBY RETURNING THESE FUNDS TO THE FEDERAL TREASURY. SINCE THIS PROJECT WILL BE A REVENUE PRODUCING PROJECT OF VITAL IMPORTANCE TO THE CITIZENS AND ECONOMY OF OUR AREA, WE TRUST THAT YOU WILL GIVE SERIOUS CONSIDERATION TO FUNDING THIS PROJECT IN A MANNER THAT WILL MAINTAIN THE PREVIOUSLY ESTABLISHED SCHEDULE.

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE, THANK YOU VERY MUCH FOR THIS OPPORTUNITY TO APPEAR BEFORE YOU AND CONVEY TO YOU THE VIEWS AND CONCERNS OF THE CITIZENS OF DENTON. THANK YOU.

Resolution of Grand Prairie (Tex.) Chamber of Commerce

WHEREAS, the federal government has determined that the Lakeview Reservoir, located predominantly in Southwest Dallas County, has a cost benefit ratio which justified the construction of said reservoir; and

WHEREAS, the construction of Lakeview Project was approved by Congress in 1965; and

WHEREAS, appropriations have consistently and continuously been made by the United States Congress for the construction of said lake; and

WHEREAS, most plans and specifications have been completed for the construction of said lake; and

WHEREAS, land acquisition and initial construction has begun; and

WHEREAS, the Trinity River Authority is the local sponsor for implementation of municipal water supply; and

WHEREAS, the Trinity River Authority and the State of Texas will construct, operate, and maintain various park facilities on and around the lake; and

WHEREAS, additional appropriations will be needed for the expeditious completion of the project;

NOW, THEREFORE, BE IT RESOLVED BY THE GRAND PRAIRIE, TEXAS, CHAMBER OF COMMERCE:

SECTION I: That the Congress of the United States is hereby specifically requested to approve the President's Budget which allocated $37.2 million for funding of Lakeview Reservoir in 1981/82.

SECTION II: That the Congress of the United States continue approval of funding for this project in the future.

PASSED AND APPROVED BY THE BOARD OF DIRECTORS OF THE Grand Prairie, Texas, Chamber of Commerce this the 17th day of March, 1981.

Fritz W Heinke
President

RESOLUTION OF MIDLOTHIAN (TEX.) CHAMBER OF COMMERCE

WHEREAS, Lakeview Reservoir is an essential water resources development project which will provide flood control, water supply and recreational benefits to a population of more than 1.5 million people; and

WHEREAS, the current status is 63% complete on the 1st embankment contract; and

WHEREAS, the proposed Federal Budget for Fiscal Year 1982 contains $37,200,000 for continued construction on Lakeview Reservoir; and

WHEREAS, the U.S. Army Corps of Engineers has indicated a Division capability of $37,200,000 for construction of Lakeview Reservoir in Fiscal Year 1982; and

WHEREAS, appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Reservoir thereby avoiding inflation-caused escalation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the Lake at the earliest possible time; therefore,

BE IT RESOLVED, that the Congress of the United States is urged to appropriate $37,200,000 for construction of Lakeview Reservoir.

PASSED AND APPROVED the 2nd day of March, 1981 by the Chamber of Commerce, Midlothian, Texas.

RESOLUTION OF DALLAS COUNTY (TEX.) COMMISSIONERS' COURT

BE IT REMEMBERED at a regular meeting of Commissioners' Court of Dallas County, Texas, held on the 2nd day of March, 1981, on motion made by Roy Orr, Comm. Dist. #4 and seconded by Jim Tyson, Comm. Dist. #3 the following order was adopted:

WHEREAS, the commitment by Congress to the construction of Lakeview Lake is to be applauded; and

WHEREAS, Lakeview will provide protection of environment and flood control along the main stem of the Trinity River as it flows through south Dallas County; and

WHEREAS, Lakeview Lake will provide a desperately needed source of water to communities that have been hurt economically because of an inadequate water supply; and

WHEREAS, a great deal of progress has been made such as the relocation of F.M. 1382, near completion of land acquisition, initiation of embankment construction and of outlet work; and

WHEREAS, the United States Army Corp of Engineers' division capability for construction in fiscal 1982 is $37.2M.

NOW, THEREFORE, BE IT RESOLVED that the Dallas County Commissioners' Court appreciates the vision, foresight and commitment of Congress regarding Lakeview Lake.

BE IT FURTHER RESOLVED that the Dallas County Commissioners' Court urges the Congress of the United States to appropriate $37.2 million.

TRINITY IMPROVEMENT ASSOCIATION

DELEGATION TO

1981 CONGRESSIONAL HEARINGS

NAMES AND ADDRESSES

1. DAVID CLAYTON, *President, Lakeview Lake Planning Council*
   Drawer B, Duncanville, TX 75116

2. JESS V. KIRK, *Secretary Treasurer, Lakeview Lake Planning*
   Council, P. O. Box 36. Duncanville, TX 75116

3. GREG PATTON, *Vice President, Lakeview Lake Planning Council*
   P. O. Box 355, Cedar Hill, TX 75104

4. JOHN R. CLARK, *Director, Lakeview Lake Planning Council*
   P. O. Box 225521, Dallas, TX 75265

5. REG CRUMP, *Mayor Pro Tem, City of Grand Prairie*
   1813 Surry Circle, Grand Prairie, TX 75050

6. MARK ADAMS, *Member, Board of Directors, Grand Prairie*
   Chamber of Commerce, P. O. Box 1227, Grand Prairie, TX 75050

7. DAVID JENKINS, *President, Oak Cliff Chamber of Commerce*
   P. O. Box 4280, Dallas, TX 75208

8. GARY HARDIN, *Chairman, Board of Directors, Oak Cliff*
   Chamber of Commerce, P. O. Box 210249, Dallas, TX 75211

9. HOWARD BROWN, *City Manager, City of Midlothian*
   235 North 8th Street, Midlothian, TX 76065

10. GEORGE KENT, *Mayor, City of Midlothian*
    417 West Avenue G, Midlothian, TX 76065

11. ED ZSCHIESCHE, *President, Midlothian Chamber of Commerce*
    505 Trail Lake, Midlothian, TX 76065

12. GEORGE WALTERS, *Mayor, City of Cedar Hill*
    Route One, Box 512, Cedar Hill, TX 75104

13. T. W. CANNADY, *Mayor Pro Tem, City of Cedar Hill*
    P. O. Box 96, Cedar Hill, TX 75104

14. C. D. BOHANNAN, *Councilman, City of Cedar Hill*
    1452 Donna, Cedar Hill, TX 75104

15. PAT MCELROY, *Member, Lakeview Lake Planning Council*
    600 East Camp Wisdom, Duncanville, TX 75116

16. RICHARD L. DAVIDSON, *Mayor, City of Duncanville*
    P. O. Box 280, Duncanville, TX 75116

17. HAROLD WHITE, *Mayor Pro Tem, City of Duncanville*
    P. O. Box 280, Duncanville, TX 75116

18. JOHNNY FAT DAY, *Past Councilman, City of Mansfield*
    P. O. Box 44, Mansfield, TX 76063

19. LOYD SEETON, *Former Mayor, City of Mansfield*
    115 Main, Mansfield, TX 76063

20. ARTHUR BLACKWOOD, *Postmaster, City of Mansfield*
    301 North Main, Mansfield, TX 76063

21. RICHARD TALIAFERRO, *Mayor Pro Tem, City of Denton*
City Hall, 215 East McKinney, Denton, TX 76201

22. A. CHRIS HARTUNG, *City Manager, City of Denton*
City Hall, 215 East McKinney, Denton, TX 76201

23. R. E. NELSON, *Director of Utilities, City of Denton*
City Hall, 215 East McKinney, Denton, TX 76201

24. DON HICKS, *Mayor Pro Tem, City of Dallas*
City Hall, Room 5A South, Dallas, TX 75201

25. TOM TAYLOR, *Director of Water Utilities, City of Dallas*
City Hall, Room 4A North, Dallas, TX 75201

26. CLARENCE WARNSTAFF, *Manager, Planning Division, Water Utilities*
City of Dallas, City Hall, Dallas, TX 75277

27. JIMMY C. PAYTON, *President, Board of Directors, Trinity River*
Authority, 440 W. State Hwy 114, Grapevine, TX 76051

28. ROBERT HARDY, JR., *Vice President, Board of Directors, Trinity*
River Authority, P.O. Box 631, Huntsville, TX 77304

29. DANNY VANCE, *General Manager, Trinity River Authority*
P. O. Box 60, Arlington, TX 76010

30. SAM SCOTT, *Manager, Executive Services, Trinity River Authority*
P. O. Box 60, Arlington, TX 76010

31. JOHN JADROSICH, *Public Information Officer, Trinity River*
Authority, P. O. Box 60, Arlington, TX 76010

32. AMON G. CARTER, JR., *Chairman, Board of Directors, Trinity*
Improvement Association, P.O. Box 1870, Ft. Worth, TX 76101

33. RUSSELL H. PERRY, *President, Trinity Improvement Association*
P. O. Box 223000, Dallas, TX 75222

34. I. M. RICE, *Executive Vice President, Trinity Improvement*
Association, 2117 W. Airport Fwy, Suite 23, Irving, TX 75062

35. SUE A. WIESE, *Secretary, Trinity Improvement Association*
2117 W. Airport Freeway, Suite 23, Irving, TX 75062

36. ED NASH, *Member, Board of Directors, Trinity River Authority*
P. O. Box 400, Kaufman, TX 75142

37. BRUCE SMITH, *Member, Board of Directors, Trinity River*
Authority, 204 First National Bank Building, Athens, TX 75751

38. MAURICE LOCKE, *President, Port Commission, City of Liberty*
P. O. Box 232, Liberty, TX 77575

39. JAMES BENGE, *Manager, Mississippi Chemical Company*
P. O. Box 1077, Liberty, TX 77575

40. ART BARKIS, *Commissioner, Port Commission, City of Liberty*
1201 Bowie, Liberty, TX 77575

41. HOMER SMITH, *Manager, Port of Liberty*
P. O. Box 1270, Liberty, TX 77575

42. JOHN HEBERT, *Commissioner, Port Commission*
P. O. Box 876, Liberty, TX 77575

43. ROY ORR, *Commissioner; President, National Association of*
Counties, 4403 West Illinois, Dallas, TX 75211

44. CARL RIEHN, *Executive Director, North Texas Municipal Water District, P. O. Drawer C, Wylie, TX 75098*

45. DICK HUEHOLT, *Vice President, Governmental & Public Affairs Dallas Chamber of Commerce, 1507 Pacific, Dallas, TX 75201*

46. KATHLEEN GOLDEN, *Secretary, Greater Dallas Planning Council 714 Fidelity Union Tower, Dallas, TX 75201*

47. RICK DOUGLAS, *Senior Vice President, Southland Real Estate Resources, P.O. Box 61208 D/FW Station, Dallas, TX 75261*

Resolution of Midlothian (Tex.) Independent School District

WHEREAS: The Lakeview Reservoir project is essential to the development of North West Ellis County through improved flood control, increased water supply and improved recreational benefits; and

WHEREAS: the proposed Federal Budget of $37,200,000 for fiscal year 1982; and

WHEREAS: the U.S. Army Corps of Engineers has indicated a capability of $37,200,000 for construction on this project for 1982; therefore

BE IT RESOLVED: the Board of Trustees for the Midlothian Independent School District urges the Congress of the United States appropriate $37,200,000 for construction of Lakeview Reservoir.

PASSED AND APPROVED the 9th day of March, 1981 by the Board of Trustees for the Midlothian Independent School District.

Resolution of Mansfield (Tex.) City Council

WHEREAS, Lakeview Lake is an essential water resources development project which will provide flood control, water supply, and recreational benefits to a population of more than 1.5 million people; and

WHEREAS, land acquisition has begun at the site for Lakeview Lake with previously appropriated funds; and

WHEREAS, the proposed Federal Budget for fiscal year 1982 contain qualified monies for continued construction on Lakeview Lake; and

WHEREAS, the U. S. Army Corps of Engineers has indicated a Division capability of $37,200,000 construction of Lakeview Lake in fiscal year, 1982; and

WHEREAS, appropriation of funds equal to the Corps capability will enable a scheduled completion of Lakeview Lake thereby avoiding inflation caused escalation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the Lake at the earliest possible time; therefore

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MANSFIELD, TEXAS:

THAT the Congress of the United States is urged to appropriate a minimum of $37,200 000, which represents the Corps of Engineers fiscal year, 1982, for construction of Lakeview Lake, thereby reducing the construction time and ultimately the saving of taxpayer's money in the cost of the lake.

AND IT IS SO RESOLVED.

APPROVED AND ADOPTED THIS 9th day of March, 1981.

RESOLUTION OF DUNCANVILLE (TEX.) CITY COUNCIL

WHEREAS: Lakeview Lake is an essential water resources development project which will provide flood control, water supply and recreational benefits to a population of more than 1.5 million people; and

WHEREAS: Land acquisition is well under way as well as construction of the embankment along with the completed relocation of FM 1382 with previously appropriated funds; and

WHEREAS: The U. S. Army Corps of Engineers has indicated a Division capability of 37.2 million dollars for construction of Lakeview Lake in Fiscal Year 1982; and

WHEREAS: Appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Lake, thereby avoiding inflation-caused escalation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the Lake at the earliest possible time;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF DUNCANVILLE, TEXAS:

That the Congress of the United States is urged to appropriate 37.2 million dollars which represents the Corps of Engineers Fiscal Year 1982, for construction of Lakeview Lake, thereby reducing the construction time and ultimately causing the saving of taxpayers' money in the cost of the Lake.

DULY RESOLVED by the City Council of the City of Duncanville, Texas, on this the 2nd day of March A.D., 1981.

STATEMENT OF ROY ORR, COMMISSIONER, DALLAS COUNTY, TEX.

My name is Roy Orr and I serve as a Dallas County Commmissioner. As a result of this position I have become involved with and currently serve as President of the National Association of Counties.

In both capacities I have learned that water related problems are of increasing concern to people across the country. I have also learned that there are no cheap or easy remedies to these problems.

In my Dallas County District the solution to many of my constituents' problems with water supply, flood control and recreation will be realized when the Corps of Engineers' Lakeview Lake is completed. Progress on Lakeview in recent years has been excellent but, quite candidly, an overly long time in coming.

Our main interest at this time is maintaining Lakeview's momentum with the objective of having the project completed by summer 1985. In pursuit of this, I would like to strongly urge that the recommended appropriation of $37.2 million for Lakeview Lake construction be included in the FY 1982 budget by this Committee.

In making this request for the citizens of Dallas County I fully realize the constraints current economic policy places on all forms of federal funding. I can only request that this body grant consideration to continuing full funding for those projects, such as Lakeview Lake, which are actually under construction. Elongation of the construction period by reduced funding could be a false economy in the long run -one that will result in an increased and unnecessary burden on those who will be repaying the local share of costs, and an increased burden of cost to the federal government.

Thank you.

RESOLUTION OF DUNCANVILLE (TEX.) CHAMBER OF COMMERCE

WHEREAS, Lakeview Lake is still an essential and vitally needed project, which is well into the construction stage; and

WHEREAS, the progress of Lakeview Lake is directly related to the foresight granted by the Sub-Committee on financial appropriations, Congress, and the Administration; and

WHEREAS, the proposed Fiscal Year 1982 contains $37,200,000.00, which matches the United States Army Corp of Engineers' capability for Fiscal Year 1982; and

WHEREAS, it is continually important that this project be funded to corp capability each year to insure the construction timetable, and thereby eliminate excessive costs which would be incurred if appropriations were less than corp capability.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Duncanville Chamber of Commerce urge that Congress appropriate $37,200,000.00 for the continued construction of Lakeview Lake.

Duly adopted on the 13th day of March, 1981.

RESOLUTION OF MANSFIELD (TEX.) CHAMBER OF COMMERCE

Whereas, Lakeview Lake is an essential water resources development project which will provide flood control, water supply, and recreational benefits to a population of more than 1.5 million people; and,

Whereas, land acquisition has begun at the site for Lakeview Lake with previously appropriated funds; and,

Whereas, the proposed Federal Budget for fiscal year 1982 contain qualified monies for continued construction on Lakeview Lake; and,

Whereas, the U.S. Army Corps of Engineers has indicated a Division capability of $37,200,000. construction of Lakeview Lake in fiscal year, 1982; and,

Whereas, appropriation of funds equal to the Corps capability will enable a scheduled completion of Lakeview Lake thereby avoiding inflation-caused escalation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the Lake at the earliest possible time; therefore, BE IT RESOLVED,

that the Congress of the United States is urged to appropriate a minimum of $37,200,000., which represents the Corps of Engineers fiscal year, 1982, for construction of Lakeview Lake, thereby reducing the construction time and ultimately the saving of taxpayer's money in the cost of the lake.

Passed and Approved This 10'th Day of March, 1981, By the Board of Directors of the Mansfield Chamber of Commerce.

R. Pratt Phillips
R. Pratt Phillips, President
Mansfield Chamber of Commerce

Resolution of Cedar Hill (Tex.) Chamber of Commerce

WHEREAS, Lakeview Lake is a federal multiple-purpose water resources project, which will provide flood control, water supply, recreational benefits and wildlife enhancement; and

WHEREAS, we appreciate the foresight that has been given by both Sub-Committees on finance in Congress for past appropriations and urge your continued support; and

WHEREAS, the proposed Federal Budget for Fiscal year 1982 contains $37,200,000.00 for Lakeview Lake construction; and

WHEREAS, the U. S. Army Corps of Engineers agree that this amount for construction fits the division capability; and

WHEREAS, the appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Lake, thereby awaiting additional needs due to inflation.

NOW, THEREFORE, BE IT RESOLVED BY THE CEDAR HILL CHAMBER OF COMMERCE

OF CEDAR HILL , TEXAS:

THAT, the Congress of the United States is urged to appropriate $37,200,000.00 for the Fiscal Year 1982 for the construction of Lakeview Lake.

ADOPTED, this the 10th day of March, 1981.

Jim Strickland
Jim Strickland
President
Cedar Hill Chamber of Commerce

RESOLUTION OF MIDLOTHIAN (TEX.) WATER DISTRICT

WHEREAS, the Midlothian Water District has contracted 42% of the water supply from Lakeview Reservoir. Our primary function is to supply the water needs in the Midlothian Water District; and

WHEREAS, we urgently need a surface supply of water, rather than depend on our present supply from wells as the water table in our area is diminishing at an alarming rate of 30 to 40 feet per year; and

WHEREAS, the lake will afford recreation facilities to the Dallas - Fort Worth Metroplex area and throughout the state, resulting in a savings of fuel and energy due to the close proximity of the densely populated area; and

WHEREAS, the flood control Lakeview will afford in our area is immeasurable in human life and property damage.

BE IT RESOLVED, that the Congress of the United States is urged to appropriate $37,200,000 which represents the Corps of Engineers Fiscal Year 1982, for construction of Lakeview Lake and assure the earliest completion date.

RESOLUTION OF MIDLOTHIAN (TEX.) CITY COUNCIL

WHEREAS, Lakeview Reservoir is an essential water resources development project which will provide flood control, water supply and recreational benefits to a population of more than 1.5 million people; and

WHEREAS, Lakeview Reservoir is at 63% completion on the 1st Embankment Contract; and

WHEREAS, the proposed Federal Budget for Fiscal Year 1982 contains $37,200,000 for continued construction on Lakeview Reservoir; and

WHEREAS, the U. S. Army Corps of Engineers has indicated a Division capability of $37,200,000 for construction of Lakeview Reservoir in Fiscal Year 1982; and

WHEREAS, appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Reservoir thereby avoiding inflation-caused escalation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the Lake at the earliest possible time; therefore,

BE IT RESOLVED, that the Congress of the United States is urged to appropriate $37,200,000 for construction of Lakeview Reservoir.

PASSED AND APPROVED the 24th day of February, 1981 by the City Council, City of Midlothian.

RESOLUTION OF OAK CLIFF (TEX.) CHAMBER OF COMMERCE

WHEREAS, the Oak Cliff Chamber of Commerce has on numerous occasions declared its support of the comprehensive plan for development of the Trinity River, as authorized by the Rivers and Harbors Act of October 27, 1965, Public Law 89-298; and

WHEREAS, Lakeview Reservoir is an integral component of the comprehensive plan; and

WHEREAS, pursuant to a directive from the Committees on Appropriations of the United States Senate and House of Representatives, the Corps of Engineers has conducted a restudy of the feasibility of Lakeview Reservoir under Plans designated A through I, and has found Plan E to be the most favorable plan in consonance with the needs for flood control, water supply, and recreation and fish and wildlife; and

WHEREAS, Plan E was also selected by the local sponsor, the Trinity River Authority, as being the most appropriate plan to assist in meeting the needs of the Dallas-Fort Worth Metroplex, and the local sponsor has furnished the necessary assurances of local participation in that Plan to the Corps of Engineers; and

WHEREAS, the requirements for flood control, water supply and recreation and fish and wildlife which would be met by the construction of Lakeview Reservoir indicate the need for its completion at the earliest possible date.

NOW, THEREFORE BE IT RESOLVED, that the Oak Cliff Chamber of Commerce urges that funds adequate to make a substantial beginning on the construction of Lakeview Reservoir, in the amount of one million dollars, remain a part of the President's proposed budget for the forthcoming fiscal year; and that construction of the project gets underway as promptly as possible.

BE IT FURTHER RESOLVED that the President and Executive Vice President of the Oak Cliff Chamber of Commerce execute this Resolution on behalf of the Board of Directors and transmit a copy to such persons and organizations as they shall deem appropriate.

ADOPTED UNANIMOUSLY at a meeting of the Board of Directors of the Oak Cliff Chamber of Commerce this 12th day of February, 1974.

RESOLUTION OF DUNCANVILLE (TEX.) INDEPENDENT SCHOOL DISTRICT

Whereas: Lakeview Lake is an essential water resources development project which will provide flood control, water supply and recreational benefits to a population of more than 1.5 million people; and

WHEREAS, land acquistion is well under way as well as construction of the embankment along with the completed relocation of FM 1382 with previously appropriated funds; and

WHEREAS, the U. S. Army Corps of Engineers has indicated a Division capability of 37.2 million dollars for construction of Lakeview Lake in Fiscal Year 1982; and

WHEREAS, appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Lake thereby avoiding inflation-caused esculation of the cost of the Lake and allowing citizens to receive the vital benefits to be provided by the lake at the earliest possible time.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE DUNCANVILLE INDEPENDENT SCHOOL DISTRICT OF DUNCANVILLE, TEXAS:

That the Congress of the United States is urged to appropriate 37.2 million dollars which represents the Corps of Engineers Fiscal Year 1982, for construction of Lakeview Lake, thereby reducing the construction time and ultimately the saving of taxpayer's money in the cost of the lake.

DULY RESOLVED BY THE DUNCANVILLE INDEPENDENT SCHOOL DISTRICT, DUNCANVILLE, TEXAS, ON THIS 9th DAY OF MARCH A.D., 1981.

RESOLUTION OF CEDAR HILL (TEX.) CITY COUNCIL

WHEREAS, Lakeview Lake is a federal multiple-purpose water resources project, which will provide flood control, water supply, recreational benefits and wildlife enhancement; and

WHEREAS, we appreciate the foresight that has been given by both Sub-committees on finance in Congress for past appropriations and urge your continued support; and

WHEREAS, the proposed Federal Budget for Fiscal year 1982 contains $37,200,000.00 for Lakeview Lake construction; and

WHEREAS, the U. S. Army Corps of Engineers agree that this amount for construction fits the division capability; and

WHEREAS, the appropriation of funds equal to the Corps capability will enable an early completion of Lakeview Lake, thereby awaiting additional needs due to inflation.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY

OF CEDAR HILL, TEXAS:

THAT, the Congress of the United States is urged to appropriate $37,200,000.00 for the Fiscal Year 1982 for the construction of Lakeview Lake.

ADOPTED, this the 10th day of March, 1981.

RESOLUTION OF GRAND PRAIRIE, TEX.

A RESOLUTION CONCERNING THE CONSTRUCTION OF LAKEVIEW RESERVOIR, THE FUNDING AND WORK PROGRAM, AND REQUESTING CONTINUED FUNDING; TO BECOME EFFECTIVE UPON ITS PASSAGE AND APPROVAL.

WHEREAS, the federal government has determined that the Lakeview Reservoir, located predominantly in Southwest Dallas County, has a cost benefit ratio which justifies the construction of said reservoir; and

WHEREAS, the construction of Lakeview Project was approved by Congress in 1965; and

WHEREAS, appropriations have consistently and continuously been made by the United States Congress for the construction of said lake; and

WHEREAS, most plans and specifications have been completed for the construction of said lake; and

WHEREAS, land acquisition has begun; and

WHEREAS, the Trinity River Authority is the local sponsor for implementation of municipal water supply; and

WHEREAS, the Trinity River Authority and the State of Texas and certain municipalities will construct, operate, and maintain various park facilities on and around the lake; and

WHEREAS, additional appropriations will be needed for the expeditious completion of the project;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF GRAND PRAIRIE, TEXAS:

SECTION I: THAT the Congress of the United States is hereby specifically requested to approve the President's Budget which allocates $37.2 million for funding of Lakeview Reservoir in 1981/82.

SECTION II: THAT the Congress of the United States continue approval of funding for this project in the future.

SECTION III: THAT the City Council of Grand Prairie, Texas expresses the appreciation of the citizens of this community for the continued support of the House and Senate Subcommittees and full Committees on appropriations for this vital project.

SECTION IV: THAT this Resolution be in full force and effect from and after its passage and approval.

STATEMENT OF JIMMY PAYTON, DIRECTOR, TRINITY RIVER AUTHORITY

Mr. CARTER. The first speaker will be Mr. Jimmy Payton, president of the Trinity River Authority of Texas.

Mr. PAYTON. Mr. Chairman, I will summarize my remarks and say to you the TRA fully supports the levels of funding recommended in the fiscal year 1982 budget for most Federal water projects we support as local sponsor within our political subdivision.

As to the Trinity River, Tex., budget item, $570,000 has been recommended to continue development of a phase II general design memorandum.

Only two of the original five major components of the Trinity River project—the Dallas Floodway extension, and multiple-purpose channel to Liberty—are found to be economically viable under current conditions and/or are included in the Corps of Engineers current plan for construction.

The Corps estimates that the Dallas Floodway extension report will be completed by January 1982 and the multipurpose channel to Liberty studies will follow in late 1982 or early 1983. TRA is advised the $570,000 will be adequate for these phase II studies in fiscal year 1982 and we urge congressional approval of this appropriation.

LAKEVIEW LAKE, TEX.

Concerning the Lakeview Lake, $37.2 million has been recommended for continued construction of this Federal flood control, water supply, and recreation project during fiscal year 1982. The Lakeview project in general, and the costs attributable to local interest for water supply and recreation specifically, will be very expensive. In the interest of long-term economy and financial relief for the entities and citizens who will actually repay the Federal Government, TRA requests that Congress continue to support funding the maximum capability limits of the Corps. For this reason, TRA fully supports the appropriation of $37.2 million which we are advised will be adequate for the fiscal year.

MAINTENANCE DREDGING

Continued maintenance dredging of the existing 6-foot channel to the Port of Liberty at river mile 45 remains of crucial importance to the industries on the lower Trinity River dependent on barge transportation. A total of $978,000 has been recommended for this purpose and TRA strongly supports this appropriation for fiscal year 1982.

The authority also offers its support to Lake Ray Roberts. While Lake Ray Roberts is within the Trinity River basin, it is outside of TRA's political subdivision and is jointly sponsored by the cities of Dallas and Denton. Lake Ray Roberts will play a crucial role as a future water supply for these two rapidly growing cities and for this reason TRA supports its construction.

WALLISVILLE RESERVOIR, TEX.

Administrative requests concern the Wallisville Reservoir and saltwater barrier at the mouth of the Trinity River remains a critical priority for TRA. After better than 8 years of delay since being enjoined in an environmental lawsuit, some limited progress can be at last reported. A revised environmental impact statement and post authorization change report on the Wallisville project is scheduled for release by the Corps' Galveston district within a matter of days.

We request that this committee include language clearly directing the Corps to complete their internal review at all levels at the earliest possible time. The Corps should be further directed to expeditiously submit their finalized documents to the Federal district court in Houston so the injunction can be lifted and, in turn, presented to Congress for approval and construction funding.

We thank this committee for its attention, leadership, and decisiveness in support of water resource development. We also understand, and as a reasonable people, support the effort to fight inflation by reducing the Federal deficit and balancing the budget. While we stand ready to sacrifice and make do with less Federal funding in the future, we still remain convinced that Federal investments in Trinity basin water resource projects remain among the soundest and highest yielding in the history of our country. Our greatest, if not only hope, is for success in the effort to end the inflationary spiral before reduced appropriations add an even greater financial burden on those who will be repaying the local share of costs to the Federal Government.

We thank you very much for the opportunity to appear before you today.

Senator STENNIS. Well, we want to thank you.

Do you have other witnesses?

LAKEVIEW LAKE, TEX.

STATEMENT OF DAVID CLAYTON, PRESIDENT, LAKEVIEW LAKE PLANNING COUNCIL

Mr. CARTER. Yes, we do. Our next statement on behalf of the Lakeview Lake Planning Council will be presented by Mr. David Clayton, president of that organization.

Mr. CLAYTON. Mr. Chairman and members of the subcommittee: My name is David Clayton and I serve as president of the Lakeview Lake Planning Council. The council is a citizen's organization that has provided grassroots support for the Corps of Engineers' Lakeview Lake for more than 16 years.

This road was relocated and improved to all for initial construction of the earthen embankment and outlet works. The Corps currently estimates that this first major contract for Lakeview construction is 63 percent complete and is actually 10 percent ahead of schedule.

The next major contract for completion of the embankment and spillway is to be advertised for bid by July 1, awarded by the end of August, and completed by September 1985. In related activities, the

Corps has acquired 10,435 acres, or 59 percent, of the 17,704 total acres required for the project.

In order to maintain Lakeview's current momentum, the planning council fully supports the recommended appropriation of $37.2 million for fiscal year 1982 construction.

While the membership of the planning council is extremely aware of the current effort to balance the budget and control inflation, we are also hopeful that public works projects such as Lakeview Lake that are currently under active construction will continue to be pursued at maximum capability levels. Current conditions almost guarantee that a large number of competent and qualified contractors will be making most favorable bids on the remainder of the project.

Thank you again for your attention, and I would be happy to answer any questions.

TRINITY RIVER MAINTENANCE DREDGING

STATEMENT OF ART BARKIS, COMMISSIONER, PORT OF LIBERTY, TEX.

Senator STENNIS. All right, Mr. Carter.

Mr. CARTER. Next will be Commissioner Art Barkis, commissioner of the Port of Liberty, Tex.

Mr. BARKIS. Thank you, Mr. Chairman. My name is Art Barkis and I currently serve as a commissioner for the Port of Liberty, Tex. Since Liberty is the last major city on the Trinity River before it empties into Galveston Bay, our citizens have historically found their well being and economic stability to rise and fall with the river level.

Currently, one of our highest short-range priorities is the continuation of maintenance dredging along the 45 miles of the authorized 6-foot channel to our port. A total of $978,000 has been proposed for this purpose and we strongly encourage this committee to include the full appropriation in the final budget.

Additional industrialization at the Port of Liberty and throughout the lower Trinity River region in recent years has proven that our present run-of-the-river navigation system with its oxbow turns, snags, and sandbars is no longer adequate. Fortunately, the Fort Worth district of the Corps of Engineers in their phase I general design memorandum and environmental impact statement on the Trinity River project concur and propose the construction of a multiple-purpose channel to Liberty. A total of $570,000 has been proposed for the completion of a phase II general design memorandum on the Trinity River project which by late 1982 or early 1983 should lay out a firm plan for solving our lingering problems with flooding and maintaining navigation passageway. We strongly support this appropriation for inclusion in the fiscal year 1982 budget.

The Wallisville Reservoir and saltwater barrier continues to languish under the shroud of an almost decade old lawsuit. According to the Corps, however, the bureaucratic logjam has begun to burst and documents providing for a revised project configuration with a considerably reduced environmental impact are about to be circulated for review. We request this committee take whatever action it is capable of to encourage the Corps to complete the review cycle as soon as possible in order to achieve the earliest possible resumption of construction on Wallisville Reservoir.

Thank you for your attention and I would be happy to answer any questions.

Senator STENNIS. Yes, sir; thank you.

Mr. CARTER. Our final speaker will be Mayor Pro Tem Don Hicks of Dallas.

RAY ROBERTS (FORMERLY AUBREY) LAKE, TEX.

STATEMENT OF DON HICKS, MAYOR PRO TEM, DALLAS, TEX.

Mr. HICKS. The mayor pro tem of Dallas has graciously consented to my representing both Denton and Dallas, so I appreciate the opportunity to discuss Ray Roberts Lake, formerly Aubrey Reservoir.

In 1980, the cities of Dallas and Denton executed contracts with the Corps of Engineers to sponsor this project. It is now underway and the purchase of land has begun. The Corps of Engineers testified to this committee of a $30 million capability, but only $12½ million has been included in the proposed budget. The local sponsors will repay the moneys with interest but not until the project is finished. Therefore, by keeping the project on schedule, the Government will hold down cost and will get its money back faster.

Ray Roberts Lake is a special project with compelling features. The people need the water, the many communities need the recreation opportunities, and properties downstream need the flood protection.

Operating within this year's budget constraints means you must carefully assess priorities. With the drought conditions that have affected much of the Nation the last couple of years, it is quite evident that water resource projects should command a high priority. Therefore, your careful consideration of funding for Ray Roberts Lake will be appreciated.

In reference to the Dallas Floodway extension, the city of Dallas supports the project. An appropriation of $570,000 for fiscal year 1982 will allow the completion of the phase II general design memorandum, recreational master plan, and initiation of the plans and specifications for construction of this project.

I thank you for the opportunity to speak to you today.

Senator STENNIS. Well, I have often referred gentlemen, to the facts that many of these projects paid back more, far more than they cost, and here you are paying right on the barrelhead. You are going to pay back the actual money.

Mr. HICKS. Yes, sir; that is right.

[The statement follows:]

STATEMENT OF DON HICKS, MAYOR PRO TEM, DALLAS TEX.

On behalf of Mayor Robert Folsom and the Dallas City Council, I appreciate this opportunity to discuss with you a very important project: Ray Roberts Lake, formerly Aubrey Reservoir. Additionally, I will comment on the Dallas Floodway extension project.

In 1980, the cities of Dallas and Denton executed contracts with the Corps of Engineers to sponsor the Ray Roberts project. The project is now underway and the purchase of land has begun. This reservoir is being constructed to help meet the needs for water supplies in the rapidly growing, water-short north-central Texas region.

On February 17, 1981, General Robinson, southwest division of the Corps of Engineers, presented testimony to this committee on the southwest division's budget for 1982. He testified to a $30 million capability. However, only $12.5 million is included in the budget submitted by President Carter.

As you are aware, the local sponsors repay the moneys with interest but not until the project is finished. Therefore, it would appear to be advisable to keep the project on schedule; by so doing, the Government will hold down cost and will get its money back faster.

Ray Roberts Lake is a special project with compelling features.

It will save energy. Ray Roberts Lake will be a gravity flow source of water. It is uphill from both Dallas and Denton. It is the last gravity source available to the cities in the Upper Trinity basin.

It will improve flood protection for a very nominal investment.

It represents the highest and best use of scarce water resources.

It will supply drinking water needed by over 20 communities.

The cost of water will be reasonable.

It will have minimum impact on the environment.

It will upgrade stream flow and improve the wildlife habitat.

The people need the water, the many communities need the recreation opportunities, and properties downstream need the flood protection.

Operating within this year's budget constraints means you must carefully assess priorities. With the drought conditions that have affected much of the Nation the last couple of years, it is quite evident that water resource projects should command a high priority. Therefore, your careful consideration of funding for Ray Roberts Lake will be appreciated.

In reference to the Dallas Floodway extension, the city of Dallas supports the project. An appropriation of $570,000 for fiscal year 1982 will allow the completion of the phase II general design memorandum, recreational master plan, and initiation of the plans and specifications for construction of this project.

Thank you.

WATER RESOURCES DEVELOPMENT EFFORT

Senator STENNIS. Well, I have been on this committee a long time, gentlemen, and I have had an opportunity there to get down into the very bowels of every part of the Government, year after year, and I have done that.

Of all the things that I have worked on, this program, these programs are the most constructive, pay off more, build up more, contribute more to the economy, to the Treasury, to life; a great part in building America. Straining to say they are under attack in a way but most all who find out really what the contribution is, it strikes me how it works out, they see the light.

I commend you highly for giving us your support, coming here to let the light burn, keep it alive, keep it going. We have to get these financial affairs straightened out. We are spending a lot of money.

A fellow back home wrote me he had two pages of complaints he could be very specific about, but down at the last he said after all is said and done I have to admit we have been having good times. So it gets better a lot of ways. We have to buckle up.

PREPARED STATEMENT OF GOVERNOR CLEMENTS OF TEXAS

Mr. CARTER. We want to thank you, Mr. Chairman, for letting our delegation appear before you. And one last item is a letter from Governor Clements of Texas to the Chairman supporting these projects.

Senator STENNIS. He is a money getter, he cut a wide role around here. I enjoyed his action.

All right, without objection, the Governor's letter will be received and included in the record.

All right; we will proceed.

Mr. Vance, you were here on the Trinity River?

Mr. VANCE. Yes, sir; we included our statement as a part of this presentation.

Senator STENNIS. That is fine.

Mr. VANCE. We just wanted to incorporate it in the interest of time.

Senator STENNIS. Thank you, gentlemen.

[The letter follows:]

STATEMENT OF WILLIAM P. CLEMENTS, JR., GOVERNOR OF TEXAS

The Texas Department of Water Resources respectfully submits the following testimony regarding Corps of Engineers public works projects located in the Trinity River Basin of the State of Texas.

Responsibility for Statewide planning and development of water resources rests with the Texas Department of Water Resources. The Department has been statutorily designated as the State agency to cooperate with appropriate agencies of the Federal government and with other State and local governmental entities in matters relating to water resource development. In order to assure orderly development and management of the State's water resources, the Department has formulated and adopted a comprehensive Statewide plan known as the "Texas Water Plan", which under Texas statutes serves as the official guide for future water development in Texas.

The plan indicates the need for specific projects, including alternatives, to meet the State's water needs and to provide for State, regional, and National economic growth and stability. The Department of Water Resources maintains a continuing planning program in order to keep the plan current to address changing economic, social, hydrologic, and environmental conditions in the State. The projects which we offer testimony are all integral elements of the State's water plan.

TRINITY RIVER TEXAS PROJECT

It is important that the public understands that the term "Trinity River Texas Project" is an administrative term coined to define four projects, each of which was separately authorized by Congress to be "undertaken independently of one another whenever funds are available and the prescribed local cooperation has been furnished." Those four separate and independent projects are:

(1) West Fork Floodway, to connect the existing flood control facilities in Fort Worth-Dallas;

(2) The Dallas Floodway Extension, to extend the existing Dallas levee system in a southerly direction through Oak Cliff and South Dallas;

(3) Tennessee Colony Lake, for flood control, water supply, and recreation; and

(4) the multi-purpose channel, for flood control and barge transportation.

Development of water supply and flood-control potential in the Trinity River Basin is important to Texas on a long-range basis. The urban expansion of the Dallas-Fort Worth area has meant increased flooding and flood damages in the fertile river bottom land of the Trinity River Valley downstream from Dallas, thus compelling the need to protect lives and urban and agricultural development along the Trinity River below Dallas. In addition, the State of Texas has a direct stake in controlling these floods because four major units of the Texas Department of Corrections are located in this area of the Trinity River. These units are intended to be self-sustaining through food and fiber production and when floods destroy these efforts, the losses are accountable through State tax funds.

Dallas Floodway Extension

Construction of the initial Dallas Floodway was begun in 1953 and completed in 1960. The existing project consists of 23 miles of rehabilitated levees (originally constructed in 1928 through 1932), floodway channels, and drainage outlets located in the City of Dallas. The Dallas Floodway Extension provides for enlargement and realignment of about 8.6 miles of the West Fork Floodway and about 10.5 miles of tributary channels and related levees in an area extending from the end of the existing Dallas Floodway System downstream to Five Mile Creek, including the lower part of White Rock Creek.

Continued work on Phase II of Advanced Engineering and Design, project benefits estimation, and the assessment of certain financial arrangements with local sponsors are included in the proposed work schedule for fiscal year 1982.

West Fork Floodway

The existing West Fork Floodway System includes enlarged and realigned channels along the West Fork Trinity River, Farmers Branch, and a diversion channel and associated levees around Westworth Village. The additional flood protection measures under study provide for protection of the area from the mouth of the West Fork segment in the Dallas Floodway System to the end of the existing West Fork Floodway at the Riverside Drive bridge in Fort Worth. The project would include enlargement and realignment of about 31 miles of tributary channels, and construction of related levees.

Multiple-Purpose Channel

The authorized multiple-purpose channel consists of a 12-foot deep by 200-foot wide multi-purpose channel for flood control and navigation extending from Trinity Bay northwestward up the Trinity River about 363 miles through Dallas to Fort Worth, with a system of 16 navigation dams and 20 navigation locks. The environmental analysis of this part of the Trinity River Project was completed in fiscal year 1978. This information is vital for full evaluation of this project and its potential for an energy-effective transportation system. Costs, benefits, and environmental impacts of the multi-purpose channel are being reevaluated under the restudy of the entire Trinity River Project.

Tennessee Colony Lake

Tennessee Colony Lake is a major element in flood protection for the middle Trinity River Basin for both agriculture and energy (lignite) production. The need to complete planning to determine the beneficial enhancement of lignite production as well as to provide needed flood protection and water supply development in and around the lake site is urgent. Tennessee Colony Lake is a major element in the Texas Water Plan for water supply to meet water requirements in the coastal areas of Houston and Galveston.

The President has included in his budget and the Corps of Engineers has indicated the capability to utilize $570,000 in fiscal year 1982, for Advanced Engineering and Design of the Trinity River Project, principally Dallas Floodway project. The expeditious completion of the Phase II planning phase of project completion is the next step in providing desperately needed flood control to the Trinity River Basin.

RAY ROBERTS LAKE

The Ray Roberts Lake (formerly Aubrey Lake), Texas project located on the Elm Fork of the Trinity River upstream of Lewisville Lake, was authorized by the River and Harbor Act of 1965. When completed, the project will be operated as a two reservoir system with Lewisville Lake to provide an additional 87,000 acre-feet per year of dependable yield. Completion of Ray Roberts Lake is essential to meet future water needs of the cities of Dallas and Denton and their customer cities.

The President has recommended $12,500,000 in his fiscal year 1982 budget to continue construction of Ray Roberts Lake. The Department strongly urges the Committee to appropriate the full amount of the President's recommendation.

LAKEVIEW LAKE

The Lakeview Lake, Texas project was authorized by the River and Harbor Act of 1965. The project is located on Mountain Creek, a tributary to the West Fork of the Trinity River. The project will provide a dependable water supply of 17,000 acre-feet per year for municipal use in the area, where additional surface-water supplies are badly needed.

The President has recommended $37,200,000 in his fiscal year 1982 budget for the continued construction of Lakeview Lake. The Department respectfully requests that the committee appropriate the President's recommended amount for fiscal year 1982 to assure the timely completion of the project.

LEWISVILLE DAM REHABILITATION

This project is located in north Texas near the City of Denton, on the Elm Fork of the Trinity River approximately 22 miles northwest of Dallas, Texas. The rehabilitation consists of constructing upstream and downstream embankment stabilization measures. The rehabilitation was initiated during FY 1979 and is scheduled for completion during fiscal year 1982. The Department supports the President's budget amount of $2,818,000 in order to complete the project and meet the scheduled completion date.

LAVON LAKE MODIFICATION AND EAST FORK CHANNEL IMPROVEMENT

The modification of the existing Lavon Dam located on the East Fork of the Trinity River about 22 miles northeast of Dallas, Texas and channel improvements to the East Fork below Lavon Lake to permit sustained flood releases without causing damages were authorized by the Flood Control Act of 1962 and the Water Resources Development Act of 1974. The modified facility is providing additional water supply storage for municipal and industrial use in an area that is experiencing rapid growth and development. Construction has been on-going since FY 1967 and the only remaining work which involves channel improvements on East Fork Increment I is scheduled for completion during fiscal year 1982. The Department supports the recommended funding amount of $2,413,000 required to continue construction and meet the scheduled completion date.

CONCLUDING COMMENTS

The Texas Department of Water Resources appreciates the opportunity to provide testimony to the Committee, and respectively urges the appropriation of funds as requested in order to accomplish the coordinated, timely, and orderly development of vitally needed water resource projects in the Trinity River Basin of the State of Texas.

SUMMARY OF REQUESTS

The Trinity Improvement Association (TIA) requests the following actions be taken by the U.S. Congress with regard to the energy and water development appropriations bill for Federal fiscal year 1982 as that bill relates to projects of the Corps of Engineers in Texas.

1. Funding requests:

Project	*Budget request*
Advance engineering and design: Trinity River, Tex.—Dallas Floodway Extension and navigation to Liberty	570,000
Construction:	
Cooper Lake and channels	650,000
Lakeview Lake	37,200,000
Lavon Lake modification and East Fork channel improvement	2,413,000
Lewisville Dam (rehabilitation)	2,818,000
Ray Roberts Lake	12,500,000
Operation and maintenance:	
Bardwell Lake	650,000
Grapevine Lake	1,213,000
Lavon Lake	1,381,000
Lewisville Dam	1,512,000
Navarromills Lake	745,000
Trinity River and tributaries	978,000

2. Administrative request: TIA requests that the committee report contain language directing the Corps of Engineers to complete their internal review of a revised environmental impact statement (EIS) and post authorization change report (PACR) on the Wallisville Reservoir and saltwater barrier at the earliest possible time.

BRAZOS RIVER BASIN PROJECTS

STATEMENT OF GLYNN A. WILLIAMS, PRESIDENT AND MEMBER OF THE BOARD OF DIRECTORS, BRAZOS RIVER AUTHORITY

Senator STENNIS. All right, Mr. Hogue, Carson Hogue, general manager, Brazos River Authority. All right, come around, Mr. Hogue. You have something with you?

Mr. WILLIAMS. Mr. Chairman, my name is Glynn Williams from Bryan, Tex. Mr. Hogue had to excuse himself, so I am the lone spokesman.

Senator STENNIS. We will take you.

Mr. WILLIAMS. I have followed your career for many years, Senator, admire you very much.

Senator STENNIS. That is mighty fine and encouraging.

Mr. WILLIAMS. Glad you made such a great, remarkable recovery.

Senator STENNIS. Thank you. All right, proceed.

Mr. WILLIAMS. Senator, my name is Glynn Williams, I am president and member of the board of directors of the Brazos River Authority, an agency of the State of Texas responsible for conserving and developing the water resources of the entire Brazos River basin in Texas, an area about the size of the State of Tennessee.

INTRODUCTION OF SUPPORTING WITNESSES

Eight other members of the authority board of 21 directors were present today. I will omit their names since they are not present, but there are eight in addition to myself.

We also have our general manager, Mr. Hogue, who just excused himself, and his assistant. We have two gentlemen from Hillsboro, Tex., representing the Aquilla project, and we have a Mr. Victor Jaeggli from the West Central Texas Municipal Water District out in the Abilene, Tex., area, very arid parts of the State. We also have with us in our delegation Ralph Daly with Dow Chemical Co., W. W. Cofield, director of environmental affairs, Transco Companies, Inc., and Mr. J. E. Roberts of Bryan, Tex., my neighbor who is here representing the Bryan College Station Chamber of Commerce and the Bryan College Station Industrial Foundation.

All of these are accompanying us to show our support of our request for appropriations.

The authority and others are submitting written statements more fully explaining our request and these have been presented before this testimony. But we appreciate this opportunity to also make a brief oral presentation.

Although we believe that expenditures for water resource development are extremely important investments in the future prosperity of the Nation and its citizens, we recognize the urgent need to limit Federal expenditures to balance the Federal income, and we fully support efforts to achieve this objective.

I would like to take just a moment to say the director of the Brazos River Authority, Senator, are businessmen, not water specialists. They are appointed by the Governor of the State to serve terms. I have been on this board of directors for about 16 years. I am in the savings and loan business and I am concerned, as you are, about this terrible inflation that we are faced with, seeing young people come in to buy houses and I have to say, "No, because you don't make enough money to qualify; it would be a burden to you." And I fully realize we must reduce spending.

I think that is, to me, more important than the tax cut. So I am certainly, and I think I speak for the board of directors of the Brazos River Authority, in saying that we are in full support of the efforts being made by the Congress trying to reduce the spending in this country. But here we are talking about investment, as you mentioned earlier, and this, of course, is good for the Nation.

We are, therefore, limiting our request to the subcommittee to the appropriations proposed in the President's budget for Corps of Engineers water resource development in the Brazos River basin for fiscal 1982, even though the proposed amounts are, in some cases, less than the Corps' stated capability for use of funds.

MILLICAN LAKE, TEX.

The appropriations supported by the authority for specific projects are $290,000 for the continuation of advanced engineering and design of Millican Lake. Millican Lake is located on the Navasota River near my hometown of Bryan. It is the last major site for water impoundment in the Brazos basin. Bryan College Station, Tex., by the report of the latest census, shows it to be the fastest growing metropolitan statistical area in the State of Texas, and it is the sixth fastest growing metropolitan statistical area in the United States.

Senator STENNIS. Is that where Texas A. & M. is?

Mr. WILLAMS. Yes, sir. Emory Ballard, you took him away.

Senator STENNIS. Oh, we got him, we want to keep him too.

Mr. WILLAMS. He is a good one, he is a dandy.

AQUILLA LAKE, TEX.

For the continuation of construction of Lake Aquilla, $16,200,000. This project is already well under construction. The Corps capability is, as I recall, a million or more in excess of this amount. This is what we are asking for, is what is in the present budget, and that is what we are asking for. For completion of construction on the San Gabriel River project, $1,780,000 in order to complete those two lakes near the Austin area. For the continuation of advanced engineering and design of the Brazos natural salt pollution control projects, $250,000. Salt is a very serious problem in the Brazos basin. And the last, $300,000 for continuation of the Brazos River and tributaries study.

Lake Millican will be a major water conservation and flood control project on the Navasota River project. The Brazos River Authority has agreed to pay the non-Federal share of the costs of this project allocated to water supply and recreation, and the authority will incorporate the conservation storage space in Lake Millican into its basinwide water supply system.

The water supplies Lake Millican will furnish are needed now. Essentially, the entire long-term dependable yields of all the lakes are committed for use.

When I went on this board 16 years ago we had water running out of our ears. Today we are out of water.

In addition to meeting present and future water needs in the vicinity of Lake Millican and in the lower Brazos basin and adjacent coastal areas downstream, water supplies from Lake Millican are needed to help meet present and future water needs in other areas of the Brazos basin by freeing up water which is now committed to meeting system needs in the basinwide water supply system, so that such water may be used to satisfy growing needs in the vicinities of these other lakes.

Lake Millican is also needed for flood control. It is the last major element in the Corps of Engineers' basinwide plan for flood control in the lower Brazos River basin. Until Millican goes into operation, areas of the lower Brazos basin and adjoining coastal areas will continue to be subject to severe damage from uncontrolled floods from the 2,200 square mile Navasota River watershed.

It is critically important that the money needed by the Corps of Engineers for continued planning and design of Millican in fiscal year 1982 be furnished so that this urgently needed project can proceed to completion without unnecessary delay, and we respectfully urge the appropriation of the full $290,000 requested in the President's budget.

[The statement follows:]

STATEMENT OF GLYNN A. WILLIAMS, PRESIDENT, BRAZOS RIVER AUTHORITY

The Brazos River Authority is the agency of the State of Texas responsible for conserving and developing the water resources of the Brazos River Basin in Texas, an area of about 42,000 square miles.

The Authority considers expenditures for water resource development to be necessary investments for the future prosperity and welfare of the nation and its citizens. At the same time, the Authority recognizes the urgent importance of limiting federal expenditures to balance with federal income and fully supports efforts to achieve this objective. Accordingly, the Authority appears before the Subcommittee in support of the appropriations requested in the President's budget for Corps of Engineers water resource development in the Brazos River Basin of Texas in Fiscal Year 1982, even though the requested amounts are in some instances less than the amounts the Corps of Engineers has stated as its capability to make use of funds for projects development in the Basin during Fiscal Year 1982. The requested appropriations supported by the Authority for specific projects are as follows:

Project	Appropriation Requested
Lake Millican	$290,000 for continuation of advance engineering and design
Lake Aquilla	$16,200,000 for continuation of construction
San Gabriel River Project (Lakes Granger and Georgetown)	$1,780,000 for completion of construction
Brazos Natural Salt Pollution Control Project	$250,000 for continuation of advance engineering and design
Brazos River and Tributaries Study	$300,000 for continuation of study

The following information is submitted in support of the requested appropriations:

LAKE MILLICAN

Lake Millican is urgently needed at the earliest practicable date as a source of water supply to meet present as well as future water supply needs. It was projected that water supplies from Lake Millican would be needed by the beginning of this decade. This projection has proven to be accurate: water supplies from Lake Millican are needed now.

Essentially all of the long-term water supply yields of the lakes in the Authority's basin-wide water supply system are committed. Lake Millican is the only feasible in-basin source of additional water supplies in the amounts necessary to meet present and future water supply requirements, not only in the immediate vicinity of Lake Millican and areas downstream, but also, through incorporation of Lake Millican into the Authority's basin-wide system, in other areas throughout the Brazos River Basin.

One of the most urgent needs for water from Lake Millican is to permit the development and use of extensive lignite deposits as sources of fuel to help meet the country's energy needs. The Brazos River Authority has already received requests for substantial amounts of water for this purpose which cannot be met from any source other than Lake Millican.

In addition to meeting present and future water needs in the vicinity of Lake Millican and in the lower Brazos Basin and adjacent coastal areas downstream, water supplies from Lake Millican are needed to help meet present and future water needs in other areas of the Brazos Basin by freeing up water which is now committed to meeting system needs in the basin-wide water supply system, so that such water may be used to satisfy growing needs in the vicinities of these other lakes.

Lake Millican is also needed for flood control. It is the last major element in the Corps of Engineers' basin-wide plan for flood control in the lower Brazos River Basin. Until Millican goes into operation, areas of the lower Brazos Basin and adjoining coastal areas will continue to be subject to severe damage from uncontrolled floods from the 2200 square-mile Navasota River watershed.

It is critically important that the money needed by the Corps of Engineers for continued planning and design of Millican in FY 1982 be furnished so that this urgently-needed project can proceed to completion without unnecessary delay, and we respectfully urge the appropriation of the full $290,000 requested in the President's budget.

LAKE AQUILLA

The President has requested $16,200,000 for continued construction of Lake Aquilla during FY 1982. We respectfully urge appropriation of the full amount of the President's request.

Lake Aquilla is urgently needed as a dependable source of water supply for the City of Hillsboro and other nearby communities in Hill, Johnson and McLennan Counties. These communities are facing potentially serious water shortages due to inadequacy of their well water supplies, and Lake Aquilla is the only feasible source of dependable water supply to meet their pressing needs.

Lake Aquilla is also needed as an element of the Corps of Engineers' basin-wide flood control system. It will provide control of floods from Aquilla Creek, the only major tributary of the Brazos River upstream of the Waco metropolitan area which still remains uncontrolled.

The Corps of Engineers has indicated a capability to utilize funds for the Aquilla Lake project in FY 1982 in excess of the $16,200,000 requested by the President, and it is our understanding that these additional funds would be used to construct basic facilities in support of public recreational use of the lake. While we recognize the important public benefits derived from public use of the Corps' lakes for water-based recreation, we believe that in a situation requiring the establishment of priorities, first attention should be given to the water supply and flood control aspects of the project, and the Corps' full capability for development of these aspects of the project can be met with the $16,200,000, which the President has requested and which we urge be approved for appropriation for the Lake Aquilla project in FY 1982.

SAN GABRIEL RIVER PROJECT (LAKES GRANGER AND GEORGETOWN)

The Brazos River Authority respectfully urges approval of the President's request for appropriation of $1,780,000 in FY 1982 for continuing the construction of Lakes Granger and Georgetown.

Deliberate impoundment of water in Lakes Granger and Georgetown was initiated early in 1980, and already almost all of the water supply to be provided by these lakes is committed under contract to meet municipal and industrial water needs in the vicinity of the lakes and in areas downstream. Construction should be completed without delay.

The Corps of Engineers has indicated a capability to utilize funds in FY 1982 on the San Gabriel River Project in excess of the $1,780,000 requested by the President. We understand that this additional capability would be utilized for construction of free public recreational facilities at Lakes Granger and Georgetown. As emphasized above, the Authority recognizes the need to limit federal expenditures, but these lakes are located in a highly urbanized and rapidly-growing part of Central Texas and will undoubtedly experience heavy public recreational use. It is therefore important that appropriate facilities be provided for the public's enjoyment of the recreational benefits they will provide.

Accordingly, although we are limiting our request for appropriations for the San Gabriel River Project to the $1,780,000 requested by the President for FY 1982, we urge that, to the extent funds may be available for this purpose when higher priority needs have been met, they be used to provide additional public recreational facilities at Lakes Granger and Georgetown.

BRAZOS NATURAL SALT POLLUTION CONTROL PROJECT

The Brazos River Authority respectfully urges approval of the President's request for appropriation of $250,000 for continued planning and design of the Brazos Natural Salt Pollution Control Project in Fiscal Year 1982.

Salt water seeps and springs concentrated in a relatively small area of the upper Brazos River Basin discharge an average of 600 tons of salt per day into the main stem of the Brazos River. As a result, main stem Brazos River water is too salty for use with conventional treatment as a municipal water supply in the uper 75 percent of the Brazos Basin, where the needs for additional municipal water supplies are becoming increasingly urgent, and the effects of the natural salt pollution are felt in varying degree all the way to the mouth of the river, despite the diluting effect of good quality water brought into the main stem by downstream tributaries of the Brazos. The Natural Salt Pollution Control Project will significantly improve the quality of water in the main stem of the river for a distance of more than 900 river miles and will allow it to be put to most effective use to help meet the present and future water needs of the people of Texas.

BRAZOS RIVER AND TRIBUTARIES STUDY

The Brazos River Authority respectfully urges approval of the President's request for appropriation of $300,000 for continuation of the Brazos River and Tributaries Study in FY 1982.

An important aspect of this study is an investigation which the Corps has been requested to initiate to explore the feasibility of converting a portion of the flood control storage space in Lake Waco to conservation storage space in order to increase the dependable water supply yield of the lake. This is to be done in coordination with studies being undertaken by the City of Waco to determine the feasibility of providing treated water supplies from Lake Waco to meet the municipal water needs of other cities in the Waco metropolitan area which are seeking a dependable surface water supply to replace their inadequate groundwater supplies. The Brazos River Authority has been joined by the City of Waco in requesting that the Corps of Engineers undertake studies to determine the feasibility and cost of increasing the conservation storage space in Lake Waco. It is important that these studies be accomplished without delay so that a response to the needs expressed by the cities in the Waco metropolitan area may be made as soon as possible.

Senator STENNIS. Well, I am impressed and pleased too with what you are doing, your presentation here, and really we want to cooperate in working out the problems, utilizing the resources.

Mr. WILLIAMS. Thank you, Senator.

SUPPORTING STATEMENTS

Senator STENNIS. By the way, at this point we can't hear all the witnesses so I want to include in the record those supporting statements and the witness list of those who are here.

[The information follows:]

STATEMENT OF PAUL H. HARVEY, SR., PRESIDENT, AQUILLA-HACKBERRY CREEK CONSERVATION DISTRICT, TEXAS

The Aquilla-Hackberry Creek Conservation District urgently requests that the Subcommittee on Energy and Water Development recommend to Congress that the Corps of Engineers' capability to use $16,200,000 for continuation of construction of Lake Aquilla be appropriated for Fiscal Year 1982.

It is our understanding that Lake Aquilla has satisfactorily complied with past and present guidelines for water projects:

1. The Environmental Impact Statements indicated no adverse effect upon the environment.
2. Favorable cost to benefit ratio has been established.
3. The core drilling indicates that the dam will be of sufficient strength to exceed the demands of pressure that will be applied against it.

The Corps of Engineers has indicated and expressed its capability to utilize the aforesaid mentioned funds if they are appropriated and released for use on the Aquilla Lake.

The Aquilla-Hackberry Creek Conservation District, Hill County, Texas is working hand-in-hand with other interested groups on the Aquilla Lake. This project's plans include restoring defaced land and impounding the much-needed, run-off waters for municipal use in the city of Hillsboro and surrounding towns and areas, thereby, improving the human enviroment.

We request full funding in Fiscal Year 1982 for Lake Aquilla, in order that it can be completed at the earliest possible date.

Thank you for your past considerations.

STATEMENT OF JOHNNY LAMPO, PRESIDENT, BRAZOS COUNTY (TEX.) INDUSTRIAL FOUNDATION, INC.

The Brazos County Industrial Foundation Board of Directors represents a broad cross-section of the Brazos County, Texas community. This organization has responsibility for development of the community for the maximum benefit of its residents.

The Board of Directors of the Brazos County Industrial Foundation, Inc. continues its long-term and consistently strong support for the Lake Millican project as recommended by the U. S. Corps of Engineers; and it urges the Congress to appropriate the full amount of $290,000 requested in the President's budget in fiscal year 1982 for continued planning and design of Lake Millican so that progress on this urgently needed project will not be further delayed.

Lake Millican is needed for flood control and for additional water supplies. One of the most urgent needs for water from Lake Millican is to permit the development and use of extensive lignite deposits in our area of the Brazos Basin as a source of fuel to help meet the country's energy needs. We believe that it is very desirable that maximum use be made of these energy resources and that in order to accomplish this, it is imperative that optimum development of the water resources of the Navasota River be achieved.

One of the objectives of the Corps of Engineers' preconstruction planning studies is to identify the site for construction of the authorized Millican Project that will allow for maximum development of the water resources with a minimum of conflict with mineral and other resources. Studies completed by the Corps of Engineers to date indicate that this can be achieved by proceeding with the authorized Millican Project at the Panther Creek site at river mile 36.0 on the Navasota River. The Brazos River Authority, which has agreed to pay the non-Federal share of the cost of the project allocated to water supply and recreation, has [illegible] Millican Project to achieve optimum development of the water resources of the Navasota River watershed.

For the reasons stated above, the Board of Directors of the Brazos County Industrial Foundation, Inc. respectfully urges the appropriation of $290,000 in Fiscal Year 1982 for continued planning and design of the Millican Lake Project.

STATEMENT OF ARTHUR VON ROSENBERG, MANAGER, PLANNING AND DEVELOPMENT DEPARTMENT, CITY PUBLIC SERVICE, TEXAS

City Public Service (CPS) is the municipally owned electric and gas utility which serves approximately one million people in the Bexar County, Texas area. CPS, like most utilities in the southwest, was until very recently almost one hundred percent dependent upon natural gas as a source of boiler fuel for the production of electrical energy. Until 1977 CPS did not have a single electrical generating unit which was capable of using coal as a boiler fuel. Today, CPS has an installed capability of 2,198,000 kilowatts from natural gas or fuel oil and 836,000 kilowatts from coal. CPS was the first utility in South Texas to build a coal fired unit.

I offer the above background information as an example of CPS' efforts to diversify its energy supply in order to reduce the financial burdens on its customers, to reduce this nation's dependence upon foreign oil supplies and to comply with provisions of the Fuel Use Act. The Fuel Use Act mandates the elimination of natural gas as a boiler fuel by 1990 and prohibits the construction of new generating facilities designed to burn only natural gas or fuel oil. For reasons of law and of economy, CPS' future expansion plans call for a heavy investment in lignite fired power plants. Lignite is a low grade coal which is relatively plentiful throughout central Texas, especially in that region of Texas drained by the Brazos River.

The operation of a large lignite fired power plant requires the consumption of tremendous quantities of water. A 1,000,000 kilowatt lignite plant operating at an 80 percent capacity factor would require approximately 18,000-20,000 acre feet of water per year for cooling and environmental controls. CPS' ultimate plans call for the construction of up to 2,000,000 kilowatts of lignite generation by the end of this century. Also, CPS is not the only utility which is planning on the construction of large lignite units in the central Texas region. The several utilities throughout the state which comprise the Electric Reliability Council of Texas (ERCOT) have joint plans amounting to an additional 4,545,000 kilowatts of lignite fired electrical generation in the Brazos River Basin by the year 1987. Some of this new generation will obtain water from existing sources such as the new Lake Limestone but no project planned after 1987 will be able to obtain firm water supplies from the Brazos River Basin because there does not currently exist enough reservoir storage in the basin to produce the required water yields.

It has come to our attention that hearings will be held through your subcommittee which have the potential for affecting water development plans in the Brazos River Basin. Specifically, your committee will be reviewing a request by the Corps of Engineers for an appropriation of $290,000 for the continuation of advance engineering and design studies for the Millican Reservoir Project to be located on the Navasota River in the Brazos River Basin. The Millican project is the only viable reservoir project in the Brazos River Basin which can yield the quantities of water required to support the development of the lignite energy resource in the needed time frame.

City Public Service strongly supports the continuation of engineering studies for the Millican project and supports the principle of further water development in the Brazos River Basin for the purpose of developing the considerable lignite energy resources located therein. Should the engineering and environmental studies to be performed by the Corps of Engineers show the feasibility of the Millican project, then CPS would certainly support the construction of this invaluable project. CPS respectfully requests your assistance in assuring the continued funding for engineering studies associated with the proposed Millican Reservoir Project.

STATEMENT OF JOHN E. MCFARLANE, GENERAL MANAGING PARTNER, BRAZOS COAL, LTD., TEXAS

Brazos Coal, Ltd. is a privately owned company headquarted in Houston, Texas. Since 1972 the primary business of Brazos Coal has been to acquire lignite in central Texas for use as a boiler fuel at a mine-mouth power generating plant to be built in Brazos County, Texas.

As a result of our experience in the development of this project, we have a firsthand knowledge of the impending power crisis in central Texas and the Gulf Coast, a crisis which will be compounded by a chronic industrial water shortage in the region. Brazos Coal further believes that in addition to power shortages during the coming decade, the area will experience skyrocketing electrical costs. Several reasons for these predictions are:

(1) Utilities will be unable to finance incremental plant capacity to keep pace with power load growth;

(2) Utilities will be unable to finance conversions of gas-fired boiler capacity to fossil fuel boilers; and

(3) There is inadequate industrial water available to support new and/or converted power plant boilers.

Natural gas is becoming prohibitively expensive to use as a boiler fuel, furthermore, the Texas Railroad Commission and the Federal Government have mandated that no new gas-fired boilers be built and that existing capacity be converted to other fuels. The resultant capital requirement is staggering and is measured in billions of dollars.

Brazos Coal, Ltd. has worked with the mining and power plant consulting firms of Bechtel Power Corporation and Morrison-Knudsen Co. We have exhaustive geological and engineering studies which prove that local lignite is by far the cheapest source of boiler fuel for the future, and that fuel cost savings resulting from its use is the only bright spot on an otherwise dismal horizon of the region's utilities. Every utility in the Brazos and Navasota River watersheds is struggling to find new ways to raise the enormous capital needed to finance new power plants and to convert old gas-fired power plants. As this capital is raised by traditional, as well as heretofore untapped sources, a formidable and currently unappreciated, roadblock lies in the way of new plant construction: there is not enough water available to cool the new plants.

While the existence of large deposits of lignite reserves is a godsend for the utilities and for the people they serve, the lack of industrial cooling water will delay gas-fired plant conversion to lignite and will prohibit the building of new facilities.

Brazos Coal believes that it is absolutely crucial therefore, that the Millican Reservoir be constructed during the coming decade if electrical blackouts and brownouts are to be avoided and if the mandates to convert gas-fired boilers to fossil fuel boilers are to be realized. Brazos Coal also believes that the construction of the Millican Reservoir will provide significant flood control benefits which will greatly reduce the cost of mining lignite in the Navasota Floodplain.

That is, in addition to providing downstream flood control, the Millican Reservoir will eliminate costly diking and leveeing of the mining area which lies in the Navasota Floodplain. These structures are required to protect miners as well as a portion of the identified lignite reserves and equipment from a 100-year-flood event in both Brazos and Grimes Counties.

This will result in cheaper mining and cheaper lignite being placed under the power plant boilers. These savings to the people of central Texas and the Gulf Coast will be measured in millions of dollars. For example, construction of the Millican Dam will produce an engineering and construction cost savings of fifteen million dollars ($15,000,000), and this figure is for mining cost savings for Brazos County alone and will likely be greater for the TMPA mine in Grimes County. This estimate is based on the assumption that the Millican Dam will significantly reduce flood and discharge levels of the Navasota River. Therefore, engineering and design costs will be minimized.

The construction of the Millican Dam provides an ever greater benefit. Millions of lignite tons underlying the floodplain will either be jeopardized or deemed unrecoverable if the dam is not built. Current market value of these lignite tons will approach $120 million ($120,000,000). The recovery of this lignite for electric power generation will provide a substantial cost savings to the consumers.

We will be happy to elaborate on the points made in this written statement and to offer engineering and technical support for your scrutiny. We are convinced that the necessity for the Millican Reservoir will be obvious and the cost of delay will be unacceptable to the taxpayers and to the users of power in the Central and Gulf Coast areas.

STATEMENT OF ROBERT G. DOHONEY, PRESIDENT, AQUILLA (TEX.) WATER SUPPLY DISTRICT

We respectfully request that this statement be included in the record of your subcommittee in support of an appropriation for Lake Aquilla in the FY 1982 budget.

The Aquilla Water Supply District was created by the Texas Legislature in 1977. It is the entity that will treat water from Lake Aquilla and transport the treated water to customers. We will wholesale water to customers such as the City of Hillsboro, other towns in our area, and rural water supply districts and corporations in the area. We are now in the process of negotiating contracts with these customers and it is probable that within the next 30 to 60 days all of the conservation water supply yield of Lake Aquilla will be sold.

We know the critical water supply problems of our customers and urge that the full amount of $16,200,000 that has been included in the President's proposed budget be appropriated by Congress. Unless the Corps of Engineers is able to complete Lake Aquilla according to its present time schedule (early in 1983), residents of our area are likely to face serious water shortages. We believe it is therefore imperative to make Aquilla Lake water available at the earliest possible time.

We strongly support the efforts of Congress and the President to pass a budget that is fiscally responsible. Inclusion in the budget of the President's request of $16,200,000 would advance that objective. Unless Aquilla water is available in 1983 our customers will probably need to drill additional and expensive wells that will not be needed when the Aquilla water is available. Because of the rapidly-declining water table the drilling of wells is a gamble. Additionally, the quality of the water produced by our wells is poor.

For these reasons we again urge that the amount of $16,200,000 for Lake Aquilla be included in the FY 1982 budget. We will have representatives at your subcommittee hearing on March 31 to speak in support of this request.

STATEMENT OF W. T. CROUCH, PRESIDENT, FILES VALLEY WATER SUPPLY CORP., TEXAS

We respectfully request that this statement be included in the record of your Subcommittee in support of an appropriation for Lake Aquilla in the FY 1982 budget.

The Files Valley Water Supply Corporation is in the process of contracting for water from the Lake Aquilla reservoir. This water is urgently needed by our organization in order to adequately supply our customers, who now depend totally upon wells and ground water. The water tables in our area are rapidly decreasing, and surface water is the only solution in the near future. The only surface water available in this area will be Lake Aquilla.

Because Lake Aquilla is the only solution we urge that the full amount of $16,200,000 that has been included in the President's proposed budget be appropriated by Congress. It is important that the present Corps of Engineers' time schedule (early in 1983) be met so as to avoid water shortages in our area. Therefore, it is imperative that Aquilla Lake water be available for use in this area at the earliest possible time.

For these reasons we urge that the amount of $16,200,000 for Lake Aquilla be included in the FY 1982 budget.

STATEMENT OF TEXLAND ELECTRIC COOPERATIVE, INC., TEXAS

Texland Electric Cooperative, Inc. is a Rural Electric Administration electric cooperative formed to provide low-cost power to its member cooperatives. Texland is currently involved in planning a 2,000-megawatt, lignite-fired power plant in east-central Texas. Preferred site locations for the proposed power plant are in the Brazos River Basin. Alternative water supply sources for the proposed plant include the diversion of surface water from the Brazos River main stream or its tributaries.

In order to maintain the Brazos River and its tributaries as viable water supply alternatives for the proposed power plant, a surface water storage facility must be constructed. This is required because the developed yields from existing storage facilities in the Brazos River Basin are almost entirely committed. Results of studies performed by the Army Corps of Engineers and the Brazos River Authority indicate that Lake Millican is the only feasible in-basin source of additional water supplies to meet Texland's water requirements as well as others in the basin. Also, due to the system operation of the existing reservoirs by the Brazos River Authority, incorporation of Lake Millican into their system would allow Texland and other new water users to utilize the yields of Lake Millican at remote locations in the Brazos River Basin.

Water of adequate quality is essential for power plant use. Where the raw water supply contains excess concentrations of certain chemical constituents, the cost of treatment can become prohibitive. The potential for this situation to occur exists in the Brazos River Basin from the salt water seeps and springs contributing large quantities of salt to the Brazos River in the upper basin. The Brazos Natural Salt Pollution Control Project of the Corps of Engineers can significantly improve the quality of the Brazos River and, thus, make this surface water supply source a more attractive alternative for the proposed Texland power plant.

Texland Electric Cooperative, Inc. wishes to submit this written statement in support of the appropriations requested in the President's budget for the Corps of Engineers' Lake Millican and Brazos Natural Salt Pollution Control Projects in Fiscal Year 1982. Texland recognizes the importance of both projects, not only from the viewpoint of being able to develop and use the extensive lignite deposits of the region to meet the country's energy demands, but also to improve the overall water resources.

STATEMENT OF DAVID DOW, MAYOR, WACO, TEX.

The City of Waco respectfully requests appropriation of funds in the following amounts in the Fiscal Year 1982 for Corps of Engineers projects in the Brazos River Basin:

Lake Millican - $290,000 for continuation of advance engineering and design

Lake Aquilla - $16,200,000 for continuation of construction

San Gabriel River Project - $1,780,000 for (Lakes Granger and Georgetown) for completion of construction

Brazos Natural Salt Pollution Control Project - $250,000 for continuation of advance engineering and design

Brazos River and Tributaries Study - $300,000 for continuation of study

Lake Millican

The Lake Millican project will provide present as well as a much needed future supply of water in the Brazos River Basin. This is the only feasible source of water to supply the immediate vicinity of Lake Millican and areas downstream. This project also will free up water which is now committed to meeting system needs in the basinwide water supply systems, so that such water may be used to satisfy growing needs inthe vicinities of these other lakes. The full amount of $290,000 requested in the President's budget for Fiscal Year 1982 is needed to assure that construction may continue without delay.

Lake Aquilla

The Aquilla Lake project will help provide flood control of the Brazos River, which flows through Waco; and it will also provide needed municipal water supplies for the City of Hillsboro and a number of other communities in the project area. The full amount of $16,200,000 requested in the president's budget for Fiscal Year 1982 is needed to assure that construction may continue without delay.

San Gabriel River Project (Lakes Granger and Georgetown)

Impoundment into these two reservoirs was begun in 1980 and most of this water has already been committed for municipal and industrial use in the vicinity of the lakes and downstream areas. In view of the fact that these projects are located in a highly urbanized and rapidly growing part of Central Texas, it is requested that the full amount of $1,780,000 requested in the President's budget for Fiscal Year 1982 be appropriated to assure that construction may continue without delay.

Brazos Natural Salt Pollution Control Project

By decreasing the salt water seeps and springs in the upper Brazos River Basins, the Natural Salt Pollution Control Project will significantly improve the quality of water in the main stream of the river for a distance of 900 river miles, and will allow it to be put to the most effective use to help meet the present and future water needs of the people of Texas. The full amount of $250,000 requested in the President's budget for Fiscal Year 1982 is needed to assure that this project will continue without delay.

Brazos River and Tributaries Study

The City of Waco is undertaking studies to determine the feasibility of providing treated water supplies form Lake Waco to meet the municipal water needs of other cities in the Waco metropolitan area which are seeking a dependable water supply to replace their inadequate ground-water supplies. In order to meet these needs, it is desirable to continue the exploration of the possibilities of increasing the amount of conservation storage space in Lake

Waco so as to increase the long-range dependable water supply yield that can be made available from this project.

The City of Waco urges the appropriation of $300,000 as outlined in the President's 1982 Fiscal Year budget. It is important that these studies be accomplished without delay so that a response to the needs expressed by the cities in the Waco metropolitan area may be made as soon as possible.

STATEMENT OF SWITZER L. DEASON, PRESIDENT, BRYAN-COLLEGE STATION CHAMBER OF COMMERCE

The Bryan-College Station Chamber of Commerce represents a broad cross-section of the Brazos County, Texas, community. This organization has responsibility for development of the community for the maximum benefit of its residents.

The Executive Committee of the Board of Directors of the Bryan-College Station Chamber of Commerce continues its long-term and consistently strong support for the Lake Millican project as recommended by the U. S. Corps of Engineers; and it urges the Congress to appropriate the full amount of $290,000 requested in the President's budget in fiscal year 1982 for continued planning and design of Lake Millican so that progress on this urgently needed project will not be further delayed.

Lake Millican is needed for flood control and for additional water supplies. One of the most urgent needs for water from Lake Millican is to permit the development and use of extensive lignite deposits in our area of the Brazos Basin as a source of fuel to help meet the country's energy needs. We believe that it is very desirable that maximum use be made of these energy resources and that in order to accomplish this, it is imperative that optimum development of the water resources of the Navasota River be achieved.

One of the objectives of the Corps of Engineers' preconstruction planning studies is to identify the site for construction of the authorized Millican' Project that will allow for maximum development of the water resources with a minimum of conflict with mineral and other resources. Studies completed by the Corps of Engineers to date indicate that this can be achieved by proceeding with the authorized Millican Project at the Panther Creek site at river mile 36.0 on the Navasota River. The Brazos River Authority, which has agreed to pay the non-Federal share of the cost of the project allocated to water supply and recreation, has endorsed selection of the Panther Creek site for construction of the authorized Millican Project to achieve optimum development of the water resources of the Navasota River watershed.

For the reasons stated above, the Executive Committee of the Board of Directors of the Bryan-College Station Chamber of Commerce respectfully urges the appropriation of $290,000 in Fiscal Year 1982 for continued planning and design of the Millican Lake Project.

STATEMENT OF HARRY F. BLOUNT, MAYOR, HILLSBORO, TEX.

The City Council of the City of Hillsboro, Texas request appropriations during fiscal year 1982 for continuation of the Aquilla Lake Project, Brazos River Basin, Hill County, Texas.

The Corps of Engineers has expressed a capability of $17,200,000 for construction funds to be used in fiscal year 1982 for the Aquilla Lake Project. We respectfully request the full $16,200,000 in appropriations which is less than the Corps of Engineers capability but is the amount provided for by the President's budget.

Hillsboro's water wells are pumping full capacity to meet peak season's consumption demands. Completion of the Aquilla Lake Project at the earliest possible date will provide a long range water supply for industrial commercial residential users without further costly investments in drilling additional water wells which could not receive maximum use after water supply from Aquilla Lake is made available.

Your committee's financial support for the past several years is responsible for the Aquilla Project reaching the final construction stage. We sincerely hope that our request for FY 82 will receive your approval. Thank you.

STATEMENT OF JOHN S. BUTNER, EXECUTIVE VICE PRESIDENT, CLEBURNE (TEX.) CHAMBER OF COMMERCE

The Cleburne Chamber of Commerce is vitally concerned with anything that affects the Brazos River Basin. Cleburne is the county seat of Johnson County, a large portion of which is in the Brazos River Basin. The Brazos River is the boundary between Johnson and Bosque Counties.

LAKE MILLICAN

The Chamber of Commerce joins the Brazos River Authority in urging approval of the appropriation of $290,000.00 for continuation of advance engineering and design of Lake Millican.

A large portion of the water supply yields of the upper Brazos River Basin is committed and construction of Lake Millican with its attendant yield would free up some of this water in the upper basin, if its salt content is reduced, for use by municipalities and other entities near lakes in that basin.

BRAZOS NATURAL SALT POLLUTION CONTROL PROJECT

The Chamber of Commerce joins the Brazos River Authority in urging approval of the President's request for appropriation of $250,000.00 for continued planning and design of the Brazos Natural Salt Pollution Control Project for Fiscal Year 1982.

Not only does the Chamber urge continued planning and design of this project, but urges that work on the project begin as soon as possible. If this water is made usable by municipalities, it will ease predicted water shortages which have been forecast for the entire area, including the Dallas/Fort Worth Metroplex and surrounding cities and towns, including Cleburne.

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This statement was adopted unanimously by the members of the Board of Directors of the Cleburne (Texas) Chamber of Commerce present at the regular meeting March 17, 1981.

STATEMENT OF EMMETT F. LOWRY, MAYOR, TEXAS CITY, TEX.

The City of Texas City has just completed and placed into operation a 10 million dollar Surface Water Treatment Plant to treat Brazos River Water for municipal purposes.

This plant is presently designed to process a maximum of 18 million gallons per day. Additionally, the intake canals and other pertinent parts of the project are built to accomodate expansion of processing facilities to 35 million gallons per day. It is anticipated that this facility would supply water for the majority of the cities in Galveston County through the Galveston County Water Authority.

While we in Texas City recognize the importance of limiting Federal expenditures in an effort to balance with income, and we fully support the efforts to achieve this objective, we would point out that water from the Brazos River supplies the multi-billion dollar petro-chemical industry located within our City, as well as many of its employees household water throughout the County. Producing the critical energy supplies of this nation, much of which is processed through our local refineries, will require ever increasing amounts of water that could be more readily and dependably supplied by the completion of the proposed work on Lake Millican.

The construction of the Natural Salt Pollution Control project on the upper reaches of the Brazos will significantly improve the quality of water that we process in our City's water plant for the consumption of citizens of the entire area by reducing its salt content substantially.

On behalf of the City Commission and the citizens of Texas City and all of those who are affected as indicated above, respectfully urge favorable consideration to appropriations requested by the Brazos River Authority on these projects.

STATEMENT OF PATRICK PHELAN, PRESIDENT, BEAUMONT (TEX.) CHAMBER OF COMMERCE

The Beaumont Chamber of Commerce, Beaumont, Texas respectfully urges your favorable consideration of the following items included in the recommended fiscal 1982 budget:

GULF INTRACOASTAL WATERWAY
(Operation and Maintenance)

NECHES RIVER SALT
WATER BARRIER
(Advance Engineering
and Design)

SABINE-NECHES WATERWAY
(Operation and Maintenance)

TAYLOR'S BAYOU
(Construction)

GULF INTRACOASTAL WATERWAY:

The Gulf Intracoastal Waterway is a vital part of this area's overall transportation network, linking the Golden Triangle (Beaumont-Orange-Port Arthur Area) with this country's vast shallow-draft domestic water system.

During calendar year 1977, some 75,000 vessels moved eastbound and a similar number westbound on the portion of this waterway between the Mississippi River and the Sabine River, while the portion between the Sabine River and Galveston handled approximately 32,000 vessels each direction.

This total waterway handles in excess of 100 million tons of cargo each year. It is estimated that the GIWW contributes directly some $2 billion to the Texas economy each year with the total direct and indirect impact on the state exceeding $20 billion each year. This waterway, with its large tonnage of petroleum products, becomes more vital to our nation's welfare as energy rises in importance.

NECHES RIVER SALT WATER BARRIER:

This salt water barrier is proposed to be constructed on the Neches River just above the Interstate Highway 10 bridge near Beaumont. The Beaumont Chamber of Commerce recognizes the need for this barrier. Under various conditions the salinity of the Neches River reaches levels which damage the fresh water vegetation and wild life of the area, as well as affecting the supply of fresh water available for industrial and commercial use. Many of the plants and refineries which depend on this supply of fresh water are involved in producing energy and various chemical products vital to our nation's economy. A permanent salt water barrier on the Neches River is important not only to this area but to the entire nation.

SABINE-NECHES WATERWAY:

The Sabine-Neches ship channel which links the Ports of Beaumont, Port Arthur and Orange with the Gulf of Mexico is the lifeline of water commerce for the deep draft ocean vessels which serve the many waterside industrial installations in this area. Many billions of private and public dollars have been invested in facilities which depend heavily on this waterway to provide safe and reliable water transportation. Many millions of additional dollars are committed to future development, also dependent on water transportation.

The Galveston District of the U.S. Corp of Engineers have underway a feasibility study to determine the need for additional deepening, widening and lengthening of the channel. The current proposal recommends for the Neches River additional deepening to 50 feet in depth; 500 feet in width and extension of the Neches River to the I.H. 10 Bridge, and a depth of 40 feet for the Sabine River, and 400 feet in width. Certain industries have expressed the view that deepening the Sabine Neches waterway to 50 feet will have the same economic impact that the Spindletop Oil Well had when it blew in 1901. Recent investments cited above are strong indicators that this prophecy is based on sound logic. Investigation thus far indicates that additional deepening and widening is necessary if the larger vessels, now in service and those under construction, are to operate economically and with maximum efficiency. Logic suggests that vessels must be loaded to capacity if maximum effeciency is to be obtained. Also, the number and increased size of the barges using this waterway requires additional widths to afford safe passing in the channel. The present 400 foot width proves hazardous for the meeting and passing of the larger and wider tankers being used today.

Peacetime demand on the local shipyard overtaxes its present capacity. The threat of a national emergency is ever increasing, considering the recent Soviet actions in Afghanistan, along with our increased defense spending. Lengthening the channel to the I.H. 10 Bridge would permit the necessary expansion that is vitally needed today and would be crucial for any national emergency situation.

The Beaumont-Port Arthur Area produces 1.3 million barrels of crude petroleum daily. This is 15% of the U.S. total production. As this nation moves toward energy independence, this waterway will become even more important in the future than it is today.

TAYLOR'S BAYOU:

This is a long over due project for our area. The dredging of Taylor's Bayou and several other nearby outlets will increase the speed and volume of run-off of water during heavy rains. During April and again in July of 1979, this area experienced severe flooding, causing many millions of dollars in damage to homes and property. At least two lives have been lost because of this flooding.

In November of 1978, the citizens of Drainage District Six passed by an overwhelming majority a $17 million bond issue to finance the local share of this vital project. The Taylor's Bayou Project is vital to the welfare of the thousands of people who now live in our area and absoutely essential to our future growth and prosperity.

We request that your committee give favorable consideration to these requested funds, for projects which are vital to Jefferson County.

STATEMENT OF WADE TERRELL, GREATER WACO (TEX.) CHAMBER OF COMMERCE

The President has requested $16,200,000 for continued construction of Lake Aquilla during FY 1982. We respectfully urge appropriation of the full amount of the President's request.

Lake Aquilla is urgently needed as a dependable source of water supply for the City of Hillsboro and other nearby communities in Hill, Johnson and McLennan Counties. These communities are facing potentially serious water shortages due to inadequacy of their well water supplies, and Lake Aquilla is the only feasible source of dependable water supply to meet their pressing needs.

Lake Aquilla is also needed as an element of the Corps of Engineers basin-wide flood control system. It will provide control of floods from Aquilla Creek, the only major tributary of the Brazos River upstream of the Waco metropolitan area which still remains uncontrolled.

The Corps of Engineers has indicated a capability to utilize funds for the Aquilla Lake project in FY 1982 in excess of the $16,200,000 requested by the President, and it is our understanding that these additional funds would be used to construct basic facilities in support of public recreational use of the lake. While we recognize the important public benefits derived from public use of the Corps' lakes for water-based recreation, we believe that in a situation requiring the establishment of priorities, first attention should be given to the water supply and flood control aspects of the project, and the Corps' full capability for development of these aspects of the project can be met with the $16,200,000 which the President has requested and which we urge be approved for appropriation for the Lake Aquilla project in FY 1982.

Also the Waco Chamber of Commerce respectfully urges approval of the President's request for appropriation of $300,000 for continuation of the Brazos River and Tributaries Study in FY 1982.

An important aspect of this study is an investigation which the Corps has been requested to initiate to explore the feasibility of converting a portion of the flood control storage space in Lake Waco to conservation storage space in order to increase the dependable water supply yield of the lake. This is to be done in coordination with studies being undertaken by the City of Waco to determine the feasibility of providing treated water supplies from Lake Waco to meet the municipal water needs of other cities in the Waco metropolitan area which are seeking a dependable surface water supply to replace their inadequate groundwater supplies. The Brazos River Authority has been joined by the City of Waco in requesting that the Corps of Engineers undertake studies to determine the feasibility and cost of increasing the conservation storage space in the Lake Waco. It is important that these studies be accomplished without delay so that a response to the needs expressed by the cities in the Waco metropolitan area may be made as soon as possible.

STATEMENT OF T. F. CRAWFORD, PRESIDENT, TRI COUNTY (TEX.) MUNICIPAL WATER DISTRICT

The Tri County Municipal Water District's Officers and Board of Directors unanimously support and join with the Brazos River Authority in urging approval of the appropriation of $290,000.00 for continuation of advance engineering and design of Lake Millican and also $250,000.00 for continued planning and design of the Brazos Natural Salt Pollution Control Project for fiscal year 1982.

With the Brazos River meandering through and between the three counties that make up the Tri County Water District and the District having water rights in Lake Whitney on the Brazos we are all vitally interested in these projects and their funding.

We are all very aware of the need for restraint in Government Spending, but the delay in these projects could have drastic effects in the future on water requirements in this area. This entire three county area is already feeling the effects of the loss of underground water and are beginning the search for surface water. With the control of the salt pollution in the Brazos and more storage in Lake Millican it would enhance our area greatly in knowing that we are beginning to make some head way towards securing water for our area in the future.

STATEMENT OF THE WEST CENTRAL TEXAS MUNICIPAL WATER DISTRICT

The West Central Texas Municipal Water District is a Water Control and Improvement District of Texas and is located in the upper watershed of the Brazos River in the domain of the Brazos River Authority.

This District was created by the Legislature of Texas to supply raw water to its four member cities of Abilene, Albany, Anson and Breckenridge, which have a combined population of 119,000 inhabitants. We also furnish water to five major oil producing companies to enhance the secondary recovery of oil. It is estimated that some 20 million barrels of oil will be added to our nation's oil supply by this process.

Our consulting engineers, Freese and Nichols, Inc., advise that since we have a limited dependable supply of water from our presently operating dams, we should reach a definite decision and firm up the next source of water supply by 1985.

This District has entered into negotiations with the Brazos River Authority and the U.S. Army Corps of Engineers to determine (a) whether part of the yield of Possum Kingdom Reservoir might become available to the District in the foreseeable future, and (b) whether the proposed Federal pollution control project (known as Brazos Natural Salt Pollution Control Project) which would improve the quality of Possum Kingdom water to a potable level is likely to be carried out in time to make that lake a viable source.

The Brazos River Authority advises us that the dependable yield of Possum Kingdom Lake has been committed by contract to industries near the mouth of the Brazos River; however, with the construction of the Millican Dam, which is near the mouth of this river, these downstream users can be supplied from the proposed Millican Lake and Possum Kingdom water could be used by the West Central Texas Municipal Water District to satisfy the needs of a semi-arid area of West Texas.

STATEMENT OF CRESTON BRAZZIL, MAYOR, GATESVILLE, TEX.

We, at the City of Gatesville urgently request that the appropriation request of $290,000.00 for advance engineering and design for Lake Millican for FY 1982 be approved. The water supplies from reservoirs in our area and upstream from us (Lake Belton, Lake Waco, Lake Stillhouse Hollow, Lake Possum Kingdom, and Lake Proctor) in the Brazos Basin are committed to system needs. These reservoirs could provide additional supplies to the areas in their immediate vicinity if downstream system needs could be met by Lake Millican.

In addition to releasing downstream requirements from the upper basin reservoirs, Lake Millican will play an important role in the development of extensive lignite deposits in Texas. The entire nation will benefit from increased energy production, if this reservoir is built.

STATEMENT OF GARY M. HALTER, MAYOR, COLLEGE STATION, TEX.

The City Council of the City of College Station wishes to join the Brazos River Authority in recommending to the Congress of the United States that the proposed Appropriations for Advanced Engineering and Design of the Lake Millican Project in the amount of $290,000 be approved.

We intend no endorsement of the project until such time as we can consider a proposed location and the overall impact of such a dam, but we recognize the extreme importance of investigating all possibilities and doing necessary engineering studies on this potential source of water for this and other communities.

STATEMENT OF R. E. DALY, MANAGER, WATER RESOURCES, DOW CHEMICAL U.S.A.

We respectfully urge approval of the President's request for appropriation of $250,000 for continued planning and design of the Brazos Natural Salt Pollution Control Project.

The Dow Chemical Company is a user of Brazos River water as well as a supplier to other industries and the City of Freeport, Texas.

Although our location and use of water is near the mouth of the Brazos River and therefore will feel less impact of the improved quality, we recognize and support the widespread beneficial effects of this project on the 900 miles of this watercourse. Quality improvement is vital to the efficient utilization and conservation of this valuable natural resource for municipal, agricultural and industrial purposes.

Again, we urge the appropriation of the $250,000 to expedite this worthwhile endeavor to reduce the serious natural pollution of the Brazos River.

STATEMENT OF OLIVER HOWARD, MAYOR, ABILENE, TEX.

The City of Abilene and its citizens fully support the Brazos River Authority in its efforts of conserving and developing the water resources in the Brazos River Basin in which our citizens reside. We are fully dependent upon the Brazos River Authority in providing the water we need now and in the future. If our Nation and State continue to exist, a coordinated effort of our Federal and State agencies will continue to be needed to supply our water needs in the future.

We are especially interested in the Lake Millican and Brazos National Salt Pollution Control Projects. These projects are a vital part of our future planning with the State of Texas and our community. Your continued support of these urgently needed projects, through the Brazos River Authority, is requested at this time. The projects will allow more water to be put to use to meet the present and future water needs of the people of Texas.

Again, we solicit your support in the FY 1982 budgets to accommodate these Brazos River Authority Projects.

STATEMENT OF SAMMY YORK, PRESIDENT, HILLSBORO (TEX.) CHAMBER OF COMMERCE

On behalf of the Hillsboro Chamber of Commerce, I would like to respectfully urge appropriation of the President's request of $16,200,000.00 for the continued construction of Lake Aquilla during Fiscal Year 1982.

Mr. Chairman, Lake Aquilla is desperately needed by the City of Hillsboro and many other surrounding communities as a dependable and adequate source and supply of surface water. Our present supply of deep well water is grossly inadequate to meet future demands and needs much above present levels of consumption. On numerous occasions in the past five years, industrial prospects looking at our community as a possible site for future plant construction have been forced to locate in other areas because of our water situation.

The flood control aspect of the Aquilla lake project is also vitally important especially to our agricultural community. Each time the Aquilla Basin floods, thousands of dollars in damage are done to growing crops in the affected areas.

Mr. Chairman, we appreciate the time and effort that you and your committee will give to this request.

RESOLUTION OF CLEBURNE (TEX.) CITY COUNCIL

WHEREAS The Energy and Water Development Subcommitties of The Senate and House Appropriations Committies will be receiving testimony on March 31 of all Corps of Engineers Water Resources Projects;

AND WHEREAS the City of Cleburne considers expenditures for water resource development to be necessary investments for the future prosperity and welfare of the nation and its citizens;

AND WHEREAS the President's budget for the Corps of Engineers Water Resource Development, has appropriations requests for the Brazos River Basin of Texas in fiscal year 1982 for the following:

PROJECT	APPROPRIATION REQUESTED
Lake Millican	290,000 for continuation of Advance Engineering & Design.
Lake Aquilla	16,200,000 for continuation of construction.
San Gabriel River Projects	
Brazos Natural Salt Pollution Control Project	250,000 for continuation of Advance Engineering and Design.
Brazos River and Tributaries Study	300,000 for continuation of Study.

AND WHEREAS all of the above projects are important to the future growth and needs of water resources for the State of Texas.

AND WHEREAS, The City of Cleburne concurrs with the great importance of these projects, but feels that the Brazos Natural Salt Pollution Control Project should be given high priority, because salt water seeps and springs concentrated in a relatively small area of the upper Brazos River Basin discharge an average of 600 tons of salt per day into the mainstream of the Brazos River. As a result, main stream Brazos River water is too salty for use with conventional treatment as a municipal water supply in the upper 75 percent of the Brazos Basin, where the needs for additional municipal water supplies are becoming increasingly urgent, and the effects of the natural salt pollution are felt in varying degree all the way to the mouth of the river, despite the diluting effect of good quality water brought into the main stream by downstream tributaries of the Brazos. The Natural Salt Pollution Control Project will significantly improve the quality of water in the main stream of the river for a distance of more than 900 river miles and will allow it to be put to most effective use to help meet the present and future water needs of the citizens of Texas.

THEREFORE, be it resolved by unanimous decision of the Cleburne City Council, we wholeheartedly endorse all of the above projects as of their importance to the future needs of the citizens in the state of Texas.

PASSED AND APPROVED by the City Council. this 24th day of March, 1981.

COAL DEPOSITS

Senator STENNIS. I notice your reference here to this lignite too. We have a little of that over in Mississippi right near where I live.

Mr. WILLIAMS. Yes, sir; we have a lot of it in Texas, a great deal of it in Texas.

Senator STENNIS. And you have the oil to go with it and so forth but we have good quality lignite and it will be valuable some day.

Mr. WILLIAMS. We have a lot of powerplants being built in our immediate area to use that lignite. We have two or three plants under construction right now.

Senator STENNIS. Well, you emphasize the need, getting less and all. We have had a drought down my way in Mississippi. The bayou for the first time in all recorded history on the Mississippi River last fall struck bottom the river was so low, and it is still low, although we had 4 inches of rain within the last 10 days.

Mr. WILLIAMS. Send some of it back West.

Senator STENNIS Yes; wish we could. Yes; you can tell a fellow up here from the West, if you can't tell him any other way just tell him the water is up and he will be running.

Mr. WILLIAMS. Thank you, Senator.

FREEPORT HARBOR, TEX.

STATEMENT OF MR. A. M. WISE, CHAIRMAN, BRAZOS RIVER HARBOR NAVIGATION DISTRICT

ACCOMPANIED BY:

PETER R. SCHAFF, GENERAL MANAGER, BRAZOS RIVER HARBOR NAVIGATION DISTRICT

LELAND KEE, GENERAL COUNSEL, BRAZOS RIVER HARBOR NAVIGATION DISTRICT

Senator STENNIS. All right.

Next we have Mr. Wise here, chairman of the Brazos River Harbor Navigation District.

All right, come around Mr. Wise. Glad to have you here. Anyone here with Mr. Wise come around. He doesn't have to have help, but he may.

Mr. WISE. Mr. Kee is counsel from the navigation district and Mr. Schaff is general manager.

Senator STENNIS. All right, Mr. Wise.

Mr. WISE. Mr. Chairman, my name is Alfred Wise and I am chairman of the Brazos River Harbor Navigation District of Brazoria County. Last year, I appeared before this committee to urge your support for the approval of appropriations for the Freeport water deepening project.

Because the previous administration failed to include this project in its fiscal year 1981 budget, we requested that this committee authorize the U.S. Army Corps of Engineers to accept an advance of funds from the local sponsor, of which I am chairman. This request was made pursuant to section 11 of the River and Harbor Act of 1925. I, and the other elected commissioners, prevailed upon several of the large users of the Freeport Harbor, including the Dow Chemical Co., Phillips Petroleum Co., and the Seaway Pipelines to agree to advance their private funds to us so that the project could begin. Our sense of commitment and urgency was based primarily upon the tremendous cost-to-benefit ratio exhibited by this project's completion as well as our desire to reduce the inflationary impact occasioned by further appropriation delays.

After securing the agreement from major users of the channel, and after frequent consultations with the Corps of Engineers, in Galveston, Tex., we came to this committee, as well as your counterparts in the Senate, and requested that you authorize the Army Corps of Engineers to accept an advance of private funds from the local sponsor of up to $10 million. Both this committee, as well as the Senate Appropriations Committee, approved our request in your respective committee markup sessions which were later reflected in the committee reports.

Highly encouraged by your support for this advance of funds, we immediately went to the citizens of the navigation district with a bond issue urging them to commit their financial support to this project. They approved the bond issue on October 25, 1980.

Recently, the Corps gave written approval to the local Corps of Engineers in Dallas to accept the advanced funds and begin the bidding process for the Freeport Harbor project.

We are now again looking to this committee to begin the appropriation of funds so that the private-sector companies who advance these funds, without interest, may be reimbursed, and the project can proceed in an orderly manner. We feel that we have accomplished an exemplary joint venture between the private and public sectors, but we must have funds appropriated to complete this project.

The Corps testified again this year, as it did in the 2 previous years, that the Freeport project has one of the best benefit-to-cost ratios of any water project in the Nation. It not only benefits people in the Freeport area, but people throughout the Midwest.

I would like to point out in as brief a manner as possible some of the reasons why this project is in need of congressional appropriations. First, the Army Corps of Engineers, although encouraged by your advance approval, is insistent that you provide some Federal appropriations to evidence your continued support for this project.

Second, I must point out the urgent need for safety improvements in the Freeport Harbor. The additional traffic resulting from completion of new facilities at Freeport, by Dow Chemical and Phillips Petroleum Co., provide critical safety and operational hazards.

Third, the Freeport Harbor serves 70 percent of new refinery and petrochemical production in the gulf coast and more than 11 percent of the total U.S. petrochemical exports pass through this port.

The Army Corps of Engineers testified earlier this year before this committee that it could provide a useful increment to the project for the remainder of fiscal year 1981 and through fiscal year 1982 for as little as $11 million. The private non-Federal interests have already pledged $4.5 million. Therefore, we respectfully request that this committee appropriate $6.5 million for fiscal year 1982.

Our written submission contains substantial information about the project, testimonials of support, and other facts and circumstances this committee will find useful.

Thank you very much for providing us with the opportunity to appear before you today. If you have any questions, we shall be happy to answer them the best we can.

Senator STENNIS. All right. Well, very interesting to me to learn how you continue to cooperate with the engineers and other opportunities you have to utilize the natural resources, putting your own money up, that is the real test. I am willing to push this any way we can. The country is off to a new start, trying to get things more nearly in order, a balanced budget. There are a lot of toes being stepped on. You do reflect that in your statement. We won't close the door on this; we will see what we can do. But don't give up, don't give up. There have been years when things sagged a little before in the water program. It is the greatest asset we have.

Mr. SCHAFF. Some amount of money would be encouraging.

Senator STENNIS. Well, the Corps doesn't need anybody to pay them back, but there are lots of groups that come and go. They deliver and they are a great asset to our Army, military preparedness, highly useful job that they do in peacetime. So we work with them and they work with us. But we have so many demands.

We will see, we will see what we can do. You are doing something about it yourself.

Do you want to say a word?

Mr. KEE. No, sir; all I can say is we are ready to go.

Senator STENNIS. Thank you very much.

[The supporting statements follow:]

Statement of Alfred M. Wise, Chairman, Brazos River Harbor Navigation District

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2. Angleton Drainage District

E. HOSPITAL DISTRICTS

1. Angleton-Danbury Hospital District
2. West Columbia-Damon Hospital District

F. INDEPENDENT SCHOOL DISTRICTS

1. Brazosport Independent School District
2. Angleton Independent School District

G. INDUSTRIES

1. Phillips Petroleum Company
2. Seaway Pipeline, Inc.
3. Cargill, Inc.
4. Dow Chemical U.S.A.
5. Connell Rice and Sugar Co., Inc.

H. CHAMBERS OF COMMERCE

1. Brazosport Chamber of Commerce
2. West Columbia Chamber of Commerce
3. Angleton Chamber of Commerce

I. LABOR UNIONS

1. International Longshoremen's Association Local No. 1723
2. International Longshoremen's Association Local No. 1818
3. Carpenter's Local No. 1084
4. Operating Engineers Local No. 450
5. Laborers' International Union of North America Local No. 116
6. Operating Engineers Local No. 564

J. *LOCAL COLLEGE*

   1. *Brazosport College Board of Regents*

K. *INTERESTED PARTIES*

   1. *Houston Port Bureau, Inc.*
   2. *Brazos Pilots*

L. *NEWSPAPER EDITORIAL*

   1. *The Brazosport Facts*

RECEIVED
MAR 26 1979
BRAZOS RIVER HARBOR
NAVIGATION DISTRICT

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PMS MR A M WISE, CHAIRMAN, DLR
BRAZOS RIVER HARBOR NAVIGATION DISTRICT

1001 PINE
FREEPORT TX 77541

THE FREEPORT HARBOR 45 FOOT CHANNEL IMPROVEMENT PROJECT HAS MY UNQUALIFIED SUPPORT AND I URGE THE SUBCOMMITIES OF THE U.S. SENATE AND HOUSE OF REPRESENTATIVES TO ALLOCATE FUNDS FOR THIS PURPOSE IN THEIR FISCAL YEAR 1980 BUDGET

A R SCHWARTZ
STATE SENATOR AND CHAIRMAN
TEXAS COASTAL AND MARINE COUNCIL
NNNN

RESOLUTION OF CLUTE, TEX.

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and;

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and;

Whereas, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

Now, Therefore, BE IT RESOLVED that the City of Clute, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 22 day of March, 1979.

STATEMENT OF E. C. STOKELY, PRESIDENT, BRAZOSPORT (TEX.) CHAMBER OF COMMERCE

WE ARE ADVISED THAT THE BRAZOS RIVER HARBOR NAVIGATION DISTRICT WILL APPEAR BEFORE YOUR COMMITTEE IN APRIL TO REQUEST NECESSARY APPROPRIATIONS FOR COMMENCEMENT OF THE APPROVED FREEPORT HARBOR, TEXAS, 45-FOOT PROJECT. WE WOULD LIKE TO ADD THE STRONGEST POSSIBLE ENDORSEMENT TO THEIR REQUEST.

AS YOU KNOW, THE FREEPORT HARBOR IS UNIQUE IN SEVERAL RESPECTS. IT IS THE ONLY TEXAS PORT LOCATED ON FRONTAL MAINLAND COASTLINE, AND THEREBY THE ONLY TEXAS PORT WHOSE PERIPHERAL EFFECTS ARE NOT LIMITED BY BARRIER ISLAND OR ESTAURINE SYSTEM GEOGRAPHY. IT IS THE ONLY PORT ACCESSING DIRECTLY ON THE UPPER COASTAL DEEPWATER CURVE, AND IT IS THE PORT OF DIRECT SERVICE TO THE CRITICAL BRAZOSPORT INDUSTRIAL/ENERGY COMPLEX.

BECAUSE OF ITS LOCATION IT HAS A HIGHER USE-EFFICIENCY AND LOWER CHANNEL RISK THAN ANY OTHER PORT ON THE TEXAS COAST, AS STUDIES HAVE BORNE OUT. BUT MOST IMPORTANTLY, WE BELIEVE, IT IS THE KEYSTONE OF WHAT SEEMS TO BE DEVELOPING AS A MAJOR ENERGY CENTER. APPROXIMATELY THREE-QUARTERS OF THE REFINING CAPACITY CURRENTLY UNDER CONSTRUCTION IN TEXAS IS SERVED BY THIS PORT.

IT IS WORTH NOTING THAT VESSEL MOVEMENTS HERE HAVE TRIPLED SINCE THE MODIFICATION PROJECT WAS AUTHORIZED IN 1970, AND THAT TOTAL TONNAGE HANDLED HERE HAS INCREASED BY ABOUT 300 PER CENT IN THAT PERIOD OF TIME.

WE URGE THAT YOU GIVE ALL POSSIBLE CONSIDERATION TO FUNDING OF THIS PROJECT IN THE FISCAL 1980 BUDGET, IN AN AMOUNT CONSISTENT WITH MAXIMUM CONSTRUCTION PROGRESS.

WE OFFER OUR SUPPORT AND ASSISTANCE, TO THE LIMIT OF OUR ABILITY, TOWARD THE TIMELY COMPLETION OF THIS IMPORTANT PROJECT.

RESOLUTION OF INTERNATIONAL LONGSHOREMEN'S ASSOCIATION LOCAL NO. 1818, TEXAS

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Union Local believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the International Longshoremen's Association Local No. 1818 hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 2nd day of March, 1979.

Resolution of Lake Jackson (Tex.) City Council

WHEREAS, the Congress of the United States has previously authorized the improvement of the channel of the Old Brazos River by authorizing the Freeport Harbor, Texas 45-Foot Project providing for the widening and deepening of the channel, and

WHEREAS, the City Council believes that the improvement of the channel is vital to keep up with the shipping needs of the area and to provide for continued economic growth and

WHEREAS, it is of great importance that the project be accomplished shortly,

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Lake Jackson, Texas heartily endorses the early construction of the Freeport Harbor, Texas 45-Foot Project in the Old Brazos River and that the Congress of the United States is urged to appropriate funds in fiscal year 1980 for the accomplishment of this vital project.

PASSED AND APPROVED THIS the 23 day of March, 1979.

Resolution of International Longshoremen's Association Local No. 1723, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Union Local believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the International Longshoremen's Association Local No. 1723 hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 16th day of March, 1979.

Resolution of Carpenter's Local No. 1084, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Union Local believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Carpenter's Local No. 1084 hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 22nd day of March, 1979.

Statement of Jerry L. Benedict, Texas State Representative

I am writing to express my full endorsement of the proposed Freeport Harbor 45' Channel Improvement Project.

The Port of Freeport, Texas is one of the most rapidly growing ports in the nation. In addition to the expected construction and importation of oil through the proposed deepwater superport to be located 26 miles off the coast from Freeport, the port is currently handling the importation of oil being stored in the nearby Bryan Mound salt domes, a project of the Federal Energy Department. The Phillips Petroleum refinery in Freeport is presently importing 100,000 barrels of oil per day and plans to increase its capacity to 190,000 barrels per day by 1980. The Dow Chemical Company is in the process of constructing a refinery in Freeport which is expected to handle 180,000 barrels of crude oil per day by 1980. The port of Freeport also serves refineries in Borger, Texas and Kansas City, Missouri, and the Seaways Terminal in Cushing, Oklahoma which is a major oil distribution center for the midwest.

The U.S. Corps of Engineers reports that the Port of Freeport experienced the largest increase in volume of cargo from 1976 to 1977 of any port in the country. The volume of cargo in 1976 was 9.7 million tons, while in 1977 it was 15.3 million tons, a total increase of 58%.

Currently the channel can only support tankers carrying 50,000 tons or less. Larger tankers, carrying some 100,000 tons of cargo have to be lightered, a very expensive and inefficient process. The channel improvement project would allow these larger tankers to use the harbor, thus decreasing the congestion of smaller vessels and reducing the chance of accidents which can cause severe environmental damage.

It is projected that the project would result in a total annual benefit of approximately $38 million. This would include transportation savings of $37.5 million, a reduction in maintenance dredging costs of $181,000, and creation of public use facilities valued at $288,000. The total benefit/cost ratio on the project is estimated to be 6.4%.

It is my firm belief that this project is an important step in reducing the high cost of energy, is critical for the Port of Freeport environmentally and economically in coping with its rapid growth, and is a wise investment of federal monies. I regret that I am unable to be in Washington to testify personally regarding this matter, but I sincerely hope that you will give it your favorable attention.

STATEMENT OF GORDON D. GOERING, VICE PRESIDENT, REFINING DIVISION, PHILLIPS PETROLEUM CO.

This is in response to your request of March 16, 1979, for a statement from Phillips in support of the Freeport Harbor 45' channel improvement project.

Phillips Petroleum Company is an integrated oil company with operations throughout the United States and the world. Freeport Harbor is extremely important to our Midwest and Gulf Coast refinery operations. We have refineries at Borger, Texas, and Kansas City, Kansas, that process foreign crude oil. Crude oil imported through Freeport Harbor is now transported to Kansas City and Borger via Seaway Pipeline and connecting pipelines. We also have a refinery at Sweeny, Texas, which processes almost 100% foreign crude oil that is primarily imported through our company dock facilities in Freeport Harbor. Phillips is constructing an expansion of the Sweeny refinery from its current capacity of 100,000 barrels per day to in excess of 190,000 barrels per day beginning in mid-1980.

It is quite evident that our refinery expansion must require increasing foreign crude oil imports to sustain our operations. Thus the need for the proposed 45' deepening project becomes more urgent each year if we wish to maintain the current level of operations in the Freeport area and provide for future growth potential.

There are numerous advantages that will be realized upon completion of the 45' deepening project. Some of the most significant are the following:

1) Larger tankers could be utilized, 100,000 dead weight tons as compared to the current 35,000-50,000 dead weight tons. This, of course, means lower transportation costs which will eventually benefit the consumer.

2) The project will result in safer harbor conditions and, therefore, less chance of environmental damage due to accidents.

3) The use of larger vessels will result in fewer vessels needed to move the same volume of oil. This will reduce harbor congestion and the chance of accidents resulting in spills.

Since domestic production can no longer supply total domestic demand, Phillips believes one very important way we can help meet the national energy needs is to import the foreign crude oil necessary to meet demands by the most efficient and cost effective method available. The proposed 45' deepening project will help us to meet this objective.

Therefore, Phillips Petroleum Company wholeheartedly supports the proposed 45' deepening project and urges its implementation at the very earliest possible date.

STATEMENT OF J. F. RAVENER, GENERAL TRAFFIC MANAGER, CONNELL RICE & SUGAR CO., INC.

We are presently exporting rice through the Port of Freeport, but the tonnage that we can load aboard a vessel due to draft restrictions at the Port of Freeport limits the quantity of rice which we can deliver to the Port of Freeport for a single vessel.

Many times rice that would have been delivered to the Port of Freeport is diverted to another Gulf Port due to the fact that the vessel scheduled to load this rice is unable to do so due to vessel's size.

We can state that if the draft to the Channel of the Port of Freeport is increased, it would enable us to deliver rice for loading aboard larger vessels and, therefore, increase the quantity of rice which we ship through the Port of Freeport.

STATEMENT OF G. E. STRANGE, GENERAL MANAGER, HOUSTON PORT BUREAU, INC.

We have reference to the Freeport Harbor, Texas (45-Foot Project) which was authorized by the River and Harbor Act of 1970, and is described in House Document No. 289, 93rd Congress, 2nd Session.

The Houston Port Bureau is a non-profit organization chartered under Texas laws and represents the Port of Houston Authority, Port of Freeport, Texas, private terminals, maritime interests and 225 other members consisting of industrial and manufacturing firms in the Houston area. The Houston Port Bureau is organized for the stated purpose of protecting and promoting the movement of waterborne commerce through the facilities of the ports it represents which includes the Port of Freeport. From this you can see we have a great interest in foreign trade and commerce and anything that would improve the flow of cargo through the Port of Freeport. We have appeared before the U.S. Army Corps of Engineers on December 7, 1977, in support of the improved draft to 50 feet which was an addition to the 45-foot project authorized by the River and Harbor Act of 1970.

It is our purpose here to assure you that we endorsed the 45-foot project as there is a definite need for deepwater facilities in Freeport which will permit Texas refineries, allied industries and other manufacturers to be competitive in the domestic and foreign markets by being able to lower their unit transportation costs which is reflected in the price of their manufactured products. Obviously, we are convinced, if we are to maintain this industrial complex as well as to continue to expand our economy, we definitely need the deepwater channel. Therefore, we heartily endorse the Freeport project and urge that appropriations be added to the FY 1980 Budget.

STATEMENT OF SEAWAY PIPELINE, INC., TEXAS

Seaway Pipeline, Inc., was organized to construct and operate a common carrier crude oil pipeline system from Freeport, Texas to Cushing, Oklahoma. Its purpose is to provide a transportation link between the Texas Gulf Coast and pipeline systems in the Cushing area now serving numerous refineries in the Midwest.

The need for this pipeline was established after extensive logistic studies concerned with the rapidly dwindling supply of domestic crude oil now supplying those Midwest refineries and alternate sources of supply. Imported crude oil via the Texas Gulf Coast proved to be the only viable alternative.

The proximity of Seaway's terminus at Cushing to existing pipeline systems and others planned or under construction in the area will make imported crude oil available to refineries not only in Oklahoma but also in Texas, Kansas, Missouri, Minnesota, Illinois and Indiana. Seaway will also supply points in the Northeast where domestic sources of supply must be substantially augmented. The authorized 45-foot project and reformulated proposed 50-foot project for Freeport Harbor will significantly enhance Seaway's ability to supply these needs.

Seaway Pipeline, Inc., began operations in October 1976. Today Seaway has three tanker berths in Freeport Harbor for unloading crude oil tankers to supply the pipeline. Because of the present constraints of the harbor (width of channel and depth of water) the tanker size is currently limited to 40,000 to 50,000 dead weight tons. While this size vessel can supply the present demands of the pipeline, the projected growth of the pipeline system ultimately will be limited by the harbor's constraints. In addition, economies of scale (120,000 dead weight tons versus 50,000 dead weight tons vessels) will substantially increase the cost of marine transportation to supply Seaway as long as the harbor is limited to the smaller vessels.

In anticipation of the 45-50 foot project, the Seaway dock facilities were structually designed to ultimately accomodate tankers in the 120,000 dead weight tons class at two berths and 50,000 dead weight ton tankers at a third berth. The ability to utlize larger tankers will minimize the cost of getting petroleum products to the consumer.

The national interest will be best served by maintaining ample supplies of crude oil to refineries in the Midwest and Northern states, and by full utilization of existing facilities -- including these refineries. The proposed 45-50 foot project will enable Seaway to serve this interest efficiently and effectively.

Accordingly, Seaway fully supports the 45-50 foot project in the improvement of Freeport Harbor to accommodate larger vessels, and urges that funding be provided to implement this project at the earliest possible date.

Resolution of Brazosport Independent School District, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Independent School District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Brazosport Independent School District, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 27th day of March, 1979.

Resolution of West Columbia-Damon Hospital District, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Hospital District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the West Columbia-Damon Hospital District hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 22nd day of March, 1979.

RESOLUTION OF OPERATING ENGINEERS LOCAL NO. 564, TEXAS

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Union Local believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Operating Engineers (1800 Members)Local No. 564 hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 20th day of March, 1979.

RESOLUTION OF BRAZOSPORT COLLEGE, TEXAS

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this College believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that Brazosport College hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 19th day of March, 1979.

RESOLUTION OF ANGLETON DRAINAGE DISTRICT, TEXAS

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of the Angleton Drainage District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Angleton Drainage District hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 20 day of March, 1979.

RESOLUTION OF OPERATING ENGINEERS LOCAL NO. 450, TEXAS

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Union Local believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Operating Engineers Local No. 450 hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 23 day of March, 1979.

Resolution of Velasco Drainage District, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of the Velasco Drainage District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Velasco Drainage District hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 20 day of March, 1979.

Resolution of Jones Creek, Tex.

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

Now, Therefore, BE IT RESOLVED that the City of JONES CREEK, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 19 day of March, 1979.

RESOLUTION OF DANBURY, TEX.

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

Now, Therefore, BE IT RESOLVED that the City of Danbury Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this [illegible] day of March, 1979.

RESOLUTION OF SWEENY, TEX.

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

Now, Therefore, BE IT RESOLVED that the City of Sweeny Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 20 day of March, 1979.

STATEMENT OF CAPT. MARK E. HICKS, BRAZOS (TEX.) PILOTS

We have been informed that the 45-foot Project for the Port of Freeport Texas, will be reviewed by your committee for funding on April 4, 1979. The Brazos Pilots would like to take this opportunity to express our unanimous support and endorsement of the Project.

The Brazos Pilots are a group of Federally licensed and State commissioned harbor pilots who provide the pilotage services required by vessels utilizing the facilities located on the Freeport, Texas channel. Since the primary responsibility of the Pilots is the safe and expeditious navigation of vessels to and from the Port of Freeport, we are keenly interested in any channel modifications or improvements. The economic impact on both the local and national economies of the 45-foot Project now before your committee is well documented. This Project also includes numerous improvements to the existing channel which will facilitate even safer operations for the entire port area. The improved channel would allow for the use of much larger more economical vessels at Freeport, and would enable all existing dock facilities to be utilized to their optimum capacities.

The Brazos Pilots thanks the committee for their considerations on this project and would like to reiterate our complete support for the 45-foot Project for Freeport, Texas.

STATEMENT OF H. H. MCCLURE, GENERAL MANAGER, DOW CHEMICAL U.S.A.

In 1970 the U. S. Government authorized a 45-foot project for improving Freeport Harbor, Freeport, Texas. At that time The Dow Chemical Company tonnage projections were based only on feedstocks and finished chemicals. Since then Dow has built a 180,000 barrel per day crude oil processing plant. Our revised and greatly increased projections are attached.

The authorized channel improvements will allow us to use larger crude oil carriers for movements into Freeport from Mexico and from super tankers offshore. We calculate that these larger tankers will reduce our freight cost by as much as $5,000,000 per year, depending upon the proportion brought in from Mexico or lightered. The oil freight reduction will be in addition to savings that will result on chemical movements which were estimated for the original authorization.

Dow has invested heavily in the Freeport area, averaging about $200,000,000 per year of new capital. This program has resulted in over 40% of our total U.S. assets being located in Freeport. About 25% of the production from these growing plants is exported. These exports are a major contributor to the U. S. balance of payments. The chemical industry in 1977 had a 5.4 billion dollar trade surplus, and we believe Dow to be the leading contributor to this surplus. To enhance the continued growth of exports, we need to take every opportunity to improve our competitive position with foreign chemical producers.

In addition to our chemicals, the new Crude Oil Processing Plant should give further assistance to the balance of payments. We require large amounts of naphtha as a raw material, which is not available in the United States. We have calculated that the new plant, which will take naphtha from crude oil, will reduce Dow payments for foreign raw materials by $1,000,000 per day. Improving the channel to a depth of 45 feet will reduce our freight costs as stated, and since these incoming ships will be foreign flag vessels the reduction of freight itself will positively impact U.S. trade dollars.

We believe the benefits of the proposed harbor improvement are much greater today than they were when the project was first authorized. We believe these improvements are essential to the reduction of domestic and foreign freight costs in Freeport, and we believe that these reductions are important to the economy of our area, to our competing with foreign producers, and to the U.S. balance of payments. We solicit your support of the appropriations so the project can proceed.

FREEPORT HARBOR DEEPWATER MOVEMENTS

		Volume (thousand short tons)		
Shipment Type	Chemical Type	1978	1980	1981
Export	General	1,450	1,670	1,750
Import	General	160	180	190
	Crude Oil	0	5,400	10,500
Import sub-total		160	5,580	10,690
Domestic	General	550	1,850	2,850
Total		2,160	9,100	15,290

STATEMENT AND RESOLUTION OF SURFSIDE BEACH, TEX.

We are advised that the Brazos River Harbor Navigation District will appear before your committee in April to request necessary appropriations for commincement of the approved Freeport Harbor, Texas, 45-foot project. We would like to add the strongest possible endorsement to their request.

Our city is committing itself to a significant sacrifice to insure our area a better harbor facility. We are not only giving up valuable land, but also losing one of our significant assets - the U. S. Coast Guard station. Also, for some extended period of time, there will be disruption of the beach and jetty.

We accept these inconveniences willingly and gladly in the long range interest of our city and entire area. We feel the benefits of this project far outweigh the inconveniences.

We continually note the increase danger of vessel movement in and out of our harbor and with the energy crisis and energy complexities of our area we are sure this will continue.

We urge that you give all possible consideration to funding of this project in the fiscal 1980 budget, in an amount consistent with maximum construction progress. We offer our support and assistance, to the limit of our ability, toward the timely completion of this important project.

Thank you for your consideration.

RESOLUTION

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

Now, Therefore, BE IT RESOLVED that the Village of Surfside Beach, Texas hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED AND ADOPTED this 21st day of March, 1979.

LETTER FROM LABORERS' INTERNATIONAL UNION OF NORTH AMERICA LOCAL NO. 116

March 20, 1979

A. M. Wise
Chairman - Brazos River
Habor Navigation District
P. O. Box 615
Freeport, Texas 77541

Dear Mr. Wise:

I am writing you concerning the improvement of the Old Brazos River for navigation.

I along with all members of Laborers Local No. 116 endorse the efforts of your organization in widening and deeping of the channel, designated as the Freeport Harbor, Texas 45- foot project.

I therefore urge that the Congress of the United States Appropriate Funds for the construction of this project.

Sincerely

Gale E. Van Hoy
Business Representative
Laborers of North America
Local Union #116
202 N. Gulf Blvd.
Freeport, Texas 77541

LETTER FROM CHARLES D. TRAVIS, EXECUTIVE DIRECTOR, TEXAS PARKS AND WILDLIFE DEPARTMENT

March 26, 1979

Mr. Don Dobel
Field Supervisor
Ecological Services, Room 229
U. S. Fish & Wildlife Service
U. S. Post Office-Courthouse
Building
601 Rosenberg
Galveston, Texas 77550

Dear Mr. Dobel:

Reference is made to mitigation of wildlife habitat losses to occur from the Freeport Harbor Project, Texas and the resolution of February 2, 1979 by the Brazos River Harbor Navigation District (local sponsor of the project) to acquire 400 acres of saline marsh in fee title for transfer to this Department as a public use area.

The Parks and Wildlife Commission, in Public Hearing March 21, 1979, adopted a motion concurring with the mitigation acreage as specified in the subject resolution, and gave approval for acceptance of the tract under the outlined conditions should the U. S. Fish and Wildlife Service decline ownership of same.

We appreciate the cooperative efforts of the U. S. Fish and Wildlife Service, U. S. Army Corps of Engineers and the Brazos River Harbor Navigation District in their efforts to effect mitigation of wildlife losses in connection with this important project.

Sincerely,

CHARLES D. TRAVIS
Executive Director

CDT:CAMcM:ph

Resolution of Angleton-Danbury Hospital District, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Hospital District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Angleton-Danbury Hospital District hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 21st day of March, 1979.

Resolution of Angleton Independent School District, Texas

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of the Angleton Independent School District believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the Angleton Independent School District, Angleton, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 Feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 29th day of March, 1979.

STATEMENT OF TOM REID, MAYOR, PEARLAND, TEX.

As Mayor of the City of Pearland and Past President of the Brazoria County Cities Association, I personally would like to endorse the improvement of the channel of the Old Brazos River for navigation by providing for the widening and deepening of this channel. This project is designated as the Freeport Harbor, Texas 45' Project.

I feel that this improvement is vital to the economy of not only the Freeport area, but to all areas of the County.

I am hopeful that the Congress will appropriate funds in the fiscal year 1980 for the accomplishment of the construction of this important project.

RESOLUTION OF WEST COLUMBIA (TEX.) CHAMBER OF COMMERCE

Whereas, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

Whereas, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

Whereas, the governing body of this Chamber of Commerce believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED that the West Columbia Chamber of Commerce hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED and ADOPTED this 22ND day of March, 1979.

RESOLUTION OF BRAZORIA COUNTY (TEX.) COMMISSIONERS' COURT

WHEREAS, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

WHEREAS, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

WHEREAS, the governing body of this Commissioners Court, Brazoria County, Texas, believes that the improvement of said Channel is vital to the economy of this County and this area;

NOW, THEREFORE, BE IT RESOLVED that the Commissioners Court of Brazoria County, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED AND ADOPTED this the 21 day of MARCH, 1979.

THE STATE OF TEXAS)
COUNTY OF BRAZORIA)

I, H. R. Stevens, Jr., Clerk County Court and Ex-Officio Clerk of the Commissioners' Court of Brazoria County, Texas, do hereby certify that the foregoing is a true and correct copy of that certain order approving Resolution (Docket Entry No. 6) as passed by the Commissioners' Court at the March 26, A. D., 1979, Special Term of Commissioners' Court, and as the same appear (s) in the Commissioners' Court Records of Brazoria County, Texas.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 26th day of March, A. D., 1979.

H. R. STEVENS, JR., Clerk County Court and Ex-Officio Clerk of the Commissioners' Court of Brazoria County, Texas.

By Deputy

[From the Brozosport (Tex.) Facts, Wednesday, March 28, 1979]

ECONOMICS OF PORT

While the offshore terminal has been in the spotlight, because of its many crises, the widening and deepening of the inshore harbor channel is at least as important to Brazoria County's future prosperity.

And this project also faces a momentary crisis. There is no money for it in the federal budget for the coming fiscal year. To try to remedy this, Congressman Ron Paul has arranged for navigation officials to be heard in the House, and Sen. John Tower for the Senate.

There are few federal expenditures that are more in the national interest than a harbor improvement that is shown by study to be economically justified. The growth it generates produces more federal revenue than the cost of the improvements. And there is greater capacity for commerce.

Angleton was the site of the first hearing on this project. That was back in 1962, and the talk then was of a 45-foot depth. In 1970 it was authorized by Congress as a 48-foot project, with a price tag of about $15 million total. It's still referred to as 48 feet, but the plans call for digging it to an actual 50 feet, and the cost now is probably close to $40 million.

But even with this degree of inflation, the cost is fairly small compared to the magnitude of the industrial facilities the deeper harbor will support, and the territory that will benefit economically.

Recently Dow announced that a deal had been made for the Mexican government to provide crude oil as a feedstock for the chemical refinery being constructed at the Oyster Creek Division. The petroleum will be moved from a Mexican port to Freeport Harbor and the Dow docks.

The present docks are limited to vessels of a maximum 50,000 dead-weight tons. When improved, the channel would allow docking of tankers as large as 120,000 tons.

The economics are shown by these two sample transportation costs of imports from a foreign port. For a 30,000-ton tanker, the cost is $3.60 per ton. For a 100,000-ton vessel, it's $1.67 per ton.

At this saving of nearly $2 per ton, the 180,000 barrels (nearly 25,000 tons) per day to be used by Dow's OCD would come to a daily saving of $50,000. For a year, this would be about $18 million. Two years of this would equal the entire local and federal cost of the improvement.

At that, Dow would not be the principal user (and beneficiary) of the project's economies. A far greater volume is intended to be unloaded at the Seaway docks.

This feeds the Phillips Sweeny Refinery, which has long since dried up its domestic supplies and operates 100 percent on foreign crude, and its huge new addition. Through the Seaway Pipeline, these docks provide oil to Phillips facilities in the Midwest — Oklahoma, Kansas, Missouri, Minnesota and Illinois.

Industrial operations over a huge territory, then, would benefit directly from the lowered costs of this harbor improvement; and the secondary effect, to those dependent on refined petroleum products, is even wider. In anticipation of the improvements, the Seaway docks were designed for 120,000-ton vessels.

Further, the widening of the channel, and the greater separation of the jetties, would increase safety for all vessels, commercial and pleasure, and diminish the chance for oil spills.

To accomplish this, the government has one of the shortest harbor channels in the nation to improve. It's less than two miles from the Dow docks to open Gulf, and about three miles from Seaway.

Considering the economic benefits, the relatively low cost of the modifications, and the 17 years the project has already dragged on, it would seem that the Freeport 48-foot program would rate a very high federal priority.

STATEMENT OF CARGILL, INC.

We have been advised that the Brazos River Harbor Navigation District will be appearing before the Subcommittees of the U.S. Senate and House of Representatives.

We encourage them in their seeking the appropriation of funds for the fiscal year 1980 budget to commence the Freeport Harbor channel improvement project including dredging to a depth of 45 feet.

As exporters of bagged rice cargoes through the Brazos Harbor Port of Freeport we endorse this project. It has become increasingly common to load vessels in excess of 20,000 tons. The draft limitations as well as inadequate warehousing have combined to make the port useful only as a facility for partial loading.

As shippers, we consider Freeport a prime location and support the petition of the Brazos Harbor Navigation District for these necessary improvements to make them competitive with other Texas Gulf ports and to allow us to use the port for complete vessel loading operations.

Resolution of Freeport, Tex.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FREEPORT, TEXAS, ENDORSING THE PROPOSED FREEPORT HARBOR, TEXAS 45-FOOT PROJECT; URGING THE CONGRESS OF THE UNITED STATES TO APPROPRIATE FUNDS IN FISCAL YEAR 1980 BUDGET TO ACCOMPLISH SAID PROJECT; AND FINDING FACT.

WHEREAS, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

WHEREAS, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

WHEREAS, the governing body of the City of Freeport believes that the improvement of said Channel is vital to the economy of this City and this area;

NOW THEREFORE, BE IT RESOLVED THAT THE CITY OF FREEPORT, TEXAS, hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet [illegible]

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED AND ADOPTED THIS 19th DAY OF March, A.D., 1979.

RESOLUTION OF ANGLETON, TEX.

WHEREAS, The Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

WHEREAS, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

WHEREAS, the governing body of this City believes that the improvement of said Channel is vital to the economy of this City and this area;

NOW, THEREFORE BE IT RESOLVED that the City of Angleton, Texas, hereby endorses the early accomplishment of the Freeport Harbor, Texas, 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 budget for the accomplishment of the construction of said project.

PASSED AND APPROVED this 19th day of March, 1979.

Charles W. Cole
Mayor, Charles W. Cole

RESOLUTION OF ANGLETON (TEX.) CHAMBER OF COMMERCE

WHEREAS, the Congress of the United States has authorized the improvement of the Channel of the Old Brazos River for navigation by providing for the widening and deepening of said Channel, which authorization is designated as the Freeport Harbor, Texas 45-Foot Project, and

WHEREAS, Brazos River Harbor Navigation District, the local non-federal sponsor of said project, is requesting Congress to appropriate funds for the accomplishment of the construction of said project, and

WHEREAS, the governing body of the Angleton Chamber of Commerce believes that the improvement of said Channel is vital to the economy of this area;

Now, Therefore, BE IT RESOLVED, that the Angleton Chamber of Commerce hereby endorses the early accomplishment of the Freeport Harbor, Texas 45-Foot Project including increasing the depth of the Channel of Old Brazos River to 50 feet.

BE IT FURTHER RESOLVED that the Congress of the United States be, and it is hereby, urged to appropriate funds in the fiscal year 1980 Budget for the accomplishment of the construction of said project.

PASSED AND ADOPTED this 19th day of March, 1979.

Jim Purdom, President
Angleton Chamber of Commerce

STATEMENT OF STEVE LINDSTROM, EXECUTIVE VICE PRESIDENT, PACIFIC NORTHWEST WATERWAY ASSOCIATION

Senator STENNIS. All right, Mr. Lindstrom, executive vice president, Pacific Northwest Waterway Association. All right, have a seat, we are glad to have you here. I know you have a good statement. I look at that clock once in a while. I wasn't watching the hands, I was watching the lights.

Mr. LINDSTROM. I understand. In the interest of time and succinctness I will not read the prepared statement, I will just ask that it be included in the record.

[The statement follows:]

STATEMENT OF STEPHEN R. LINDSTROM, EXECUTIVE VICE PRESIDENT, PACIFIC NORTHWEST WATERWAYS ASSOCIATION

Good day, Mr. Chairman. It is truly an honor and pleasure to sit before you today in testimony to the Subcommittee on Energy and Water Development of the Committee on Appropriations. The Pacific Northwest Waterways Association is grateful for this opportunity to express our concerns and recommendations about the Fiscal Year 1981 Supplemental Appropriations and the Fiscal Year 1982 Budget.

PNWA has been visiting Congress since 1934 on behalf of many valuable and productive federal public works and related legislation in the region comprised of Alaska, Idaho, Montana, Oregon and Washington. Our first efforts--back when we were named the Inland Empire Waterways Association and before we merged with the Northwest Rivers & Harbors Congress--were directed toward the inclusion of a navigation lock in Bonneville Dam. Needless to say, that lock was built--and we are returning this year to ask, among other things, for continued funding of the new lock at Bonneville Dam, an urgent regional need half a century later!

Teamed with the need for the new lock at Bonneville Dam, are two other conspicuous goals of our organization: A continued appropriate level of relief from the impacts of the Mt. St. Helens eruption and a scrutiny and screening of the regulatory activities of the federal establishment which bear so heavily on every aspect of the average American's life.

PNWA is fully aware of and sympathetic to the financial distress of our nation and our federal budgetary crisis. Further, we are aware and generally supportive of the new Administration's and the Congress' intentions to limit federal spending and reduce the level of government involvement in our everyday lives.

We have investigated thoroughly our extensive and longstanding list of desirable federal projects in our region, and reduced it to a very few in light of current economic and political attitudes. Only the most absolutely essential items remain in our testimony this year.

However, we feel very strongly that we cannot in good conscience abrogate long standing efforts to provide energy, navigation, flood control, fish and wildlife enhancement, conservation, and other facilities in the Pacific Northwest and Alaska.

Three reasons support our point: First, our region will suffer shortages of electrical generating capacity in every forecast year of the 1980's if low water conditions occur. Second, in order to pursue a balance of payments in our foreign trade, we must continue to strengthen our ability to move goods and provide services efficiently and by domestic means. Third, failure to invest the necessary dollars in these projects--

by their very nature, links in the same chain--would do irreparable damage to the entire series. Not only would a good faith contract between the federal government and the people of our region be broken, but clearly defined goals of this Congress and the new Administration would be undercut. Specifically, energy independence, improvement in the balance of trade deficit, energy efficiency, domestic processing of resources taken within the 200-mile Zone and national defense interests, would be undercut if continued and orderly federal investment ceases in the Pacific Northwest and Alaska.

Therefore, it is imperative that the projects and other investments about which we show great concern be closely and positively evaluated by you in light of both economic conditions of today and the real-world needs both now and in future decades.

WATER AND POWER RESOURCES SERVICE

The President's Fiscal Year 1982 budget request for the Pacific Northwest Region of the Water and Power Resources Service (formerly the Bureau of Reclamation) totals $95,107,000, of which $1,310,000 will be received from area water users and $2,765,000 will be in grants from the State of Washington.

The request includes $64,349,000 for 17 projects to be financed from the construction appropriation; $25,576,000 under the operation and maintenance category; $2,475,000 for general investigations; $2,680,000 for general administration expenses; $1,685,000 for the Lewiston Orchards Irrigation District Small Projects Loan; and, $27,000 for administration of the Loan program.

The construction appropriation fund includes four major construction projects; five drainage and minor construction projects; three safety of dams projects; and, five rehabilitation and betterment projects.

The Pacific Northwest Waterways Association strongly supports these elements of the President's budget.

BONNEVILLE POWER ADMINISTRATION

The Fiscal Year 1982 federal budget request to Congress by the Bonneville Power Administration totals $928,900,000. Though the BPA Fund is self-financing under provisions of the Federal Columbia River Transmission System Act of 1974 (P.L. 93-454), Congressional review and approval is necessary.

The FY 82 budget includes continued implementation of the Pacific Northwest Electric Power Planning and Conservation Act; several major construction elements; including one--the Surprise Valley Area Service--which requires specific Congressional approval; provisions for the purchase of firm replacement power (again, an indication of the forecast shortfalls of generating capacity for the region); and sufficient resources to operate and maintain the other facets of the BPA program.

Specifically, the BPA budget request incorporates funds for the following areas: Operation and Maintenance, $104,000,000, or 11%; Purchase power and Wheeling, $370,000,000, or 40%; Construction, $216,000,000, or 23%; Associated Project Costs, $94,000,000, or 10%; Reimbursable Programs, $97,000,000, or 10%; and, Interest Expense on Borrowing, $47,900,000, or 5%.

We urge that significant savings ($8,000,000 - $50,000,000) be realized through your refusal to find an underwater crossing at Crow Butte, urging instead a normal overhead crossing for that high voltage transmission line.

PNWA urges immediate approval of the BPA proposed budget for FY 82, including the necessary approval of the Surprise Valley Area Service plan.

We further urge approval of the BPA request for FY 81 Supplemental Appropriations in the amount of $104,000,000.

U. S. ARMY CORPS OF ENGINEERS

The Corps of Engineers' North Pacific Division budget request to Congress for FY 82 totals $323,282,000. The amounts budgeted are adequate to maintain power-on-line schedules at on-going power-producing projects. This is extremely important because the Pacific Northwest faces forecasted shortages of electricity every year throughout the decade of the 1980s.

PNWA strongly supports the proposed budget amounts for the North Pacific Division. However, PNWA is gravely concerned by the low level of proposed funding for certain other categories.

PNWA believes that additional capabilities expressed by the North Pacific Division must be funded this year. We feel it is imperative that continuity be maintained in the region, otherwise drastic problems will arise in the immediate future, even though a few dollars might be saved in one budget year.

PNWA is appreciative of the foresight of the Congress in adding funds to the FY 1981 Appropriation Bill for two new GI study starts, five GI study resumptions, two new AE&D starts, one construction start, and one construction resumption all in the North Pacific Division.

PNWA is greatly disappointed by the absence of any new AE&D or construction starts and the inclusion of only one GI new start in the budget requests for the Corps of Engineers program in the Pacific Northwest and Alaska for FY 1982. The restrictions on new General Investigation and AE&D starts combined with constrained funding levels of these programs will have a serious impact on the future economic growth and welfare in this region. We are also concerned with the absence of any new starts in the Construction category. We feel strongly that the level of funding of this important program will have a significant impact on the immediate employment, energy, and water supply of the region. PNWA believes that new investigations, AE&D and construction starts involving hydroelectric power and navigation should rank high in the budget program for the Corps and other Federal agencies and is recommending a limited number of new starts.

The Corps has reported a capability to handle 71 studies and projects beyond the current budget proposals. After careful evaluation, we have concluded that nine are paramount in fulfilling PNWA's goals for water and related land resource development this year. They are summarized in the table on the following page.

ADDITIONAL CAPABILITY RECOMMENDATIONS

TYPE	AMOUNT	PROJECT
GI	$ 500,000	Columbia River and Tributaries
GI	820,000	Upper Snake River and Tributaries
GI (Pl.& Eng.)	3,400,000	New Lock at Bonneville Dam
GI (Pl.& Eng.)	1,500,000	McNary Second Powerhouse
GI (Pl.& Eng.)	250,000	Rivergate Flood Control, Plan I
Cont. AE&D	266,000	Bradley Lake, Alaska
Const.(New Start)	9,500,000	Bonneville Power Units
Const.(New Start)	4,400,000	Snettisham Unit Three
Const.(New Start)	4,500,000	Strube Lake and Cougar Additional Unit
	$25,136,000	Total Recommended Increase

PNWA's recommended additional amount of $25,136,000 would represent an increase of 7.8 percent of the 1982 budget request for programs in the North Pacific Division.

We also support strengthening the Section 107 Small Projects program, especially to the benefit of the East Bay Marina in Olympia, Washington and the Kenai Small Boat Harbor, Alaska, totalling but $1,042,000.

SUMMARY

PNWA would appreciate your attention to these endorsements and requests. Thank you very much for the opportunity to testify.

PUBLIC UTILITY GENERATION SYSTEMS

STATE OF WASHINGTON

HYDROELECTRIC

	Gross Value	Peaking Capacity KW
CHELAN COUNTY NO. 1	$ 600,095,890	2,009,000
COWLITZ COUNTY NO. 1	19,812,467	74,000
DOUGLAS COUNTY NO. 1	190,583,000	760,000
GRANT COUNTY NO. 2	307,319,034	1,895,000
PEND OREILLE COUNTY NO. 1	21,198,000	77,000
SEATTLE CITY LIGHT	254,323,280	1,471,300
TACOMA CITY LIGHT	200,717,369	659,700
WASHINGTON PUBLIC POWER PACKWOOD PROJECT	12,270,000	31,500

NUCLEAR

Utility	Gross Value	Peaking Capacity KW
WASHINGTON PUBLIC POWER SUPPLY SYSTEM (HANFORD GENERATING PROJECT)	$ 67,250,000	860,000

MUNICIPALLY OWNED UTILITIES IN OREGON

NAME	NUMBER OF CUSTOMERS	HYDRO-ELECTRIC GENERATION MWH
ASHLAND	6,477 1/	
BANDON	2,201	
CANBY	3,266	
CASCADE LOCKS	766	
DRAIN	629	
EUGENE	63,376	394,761
FOREST GROVE	5,707	
MCMINNVILLE	7,517	
MILTON-FREEWATER	3,871	
MONMOUTH	2,430	
SPRINGFIELD	19,391	
TOTAL	115,631	

1/ College town with large transit population; therefore, accounts vary considerably on monthly basis.

INVESTOR OWNED - PRIVATE UTILITIES

	Generation Capacity KW	Investment for Generation System	Miles Transmission Line	Investment In Transmission Lines
IDAHO POWER COMPANY	2,362,824	$ 699,721,952	4,595	$119,055,981
MONTANA POWER COMPANY	1,074,860	283,807,000	6,361	144,762,000
PACIFIC POWER & LIGHT COMPANY	3,956,706	1,157,562,665	6,457	303,211,000
PORTLAND GENERAL ELECTRIC COMPANY	2,744,295	1,011,139,577	1,462	74,268,267
PUGET SOUND POWER & LIGHT COMPANY	934,797	272,084,000	982	43,646,000
WASHINGTON WATER POWER COMPANY	1,032,899	225,650,638	2,052	84,468,118

STATE OF WASHINGTON

OPERATING PORTS

Name	Assessed Valuation	Value Port Property	Annual Tonnage Over Port Owned Facilities	Port District Total
ALLYN	$	$		
ANACORTES	512,000,000	3,600.000	512,000,000	-
BELLINGHAM	3,063,121,864	20,401,709	492,115	1,870,651
BENTON	1,299,624,948	9,800,000	-	2,000
BREMERTON	968,212,681	8,341,000	-	-
CAMAS/WASHOUGAL	501,584,862	6,900,000	-	-
CHELAN	1,010,151,102	4,445,373	-	-
CLARKSTON	236,896,057	918,671	334,807	334,807
COLUMBIA	147,096,631	626,438	-	191,838
COUPEVILLE	143,184,679	210,000	-	-
DOUGLAS	494,454,000	2,828,000	-	-
EDMONDS	470,158,329	6,112,542	-	-
EVERETT	1,902,282,744	58,679,770	2,157,932	2,481,621
GRAYS HARBOR	1,667,882,702	32.753,878	2,043,062	3,265,430
ILWACO	109,582,220	3,135,766	-	-
KAHLOTUS	20,186,260	300,000	200,000	200,000
KALAMA	106,408,370	8,112,759	1,112,407	1,048,651
KENNEWICK	1,230,967,269	9,000,000	-	350,000
KLICKITAT	166,970,303	2,595,000	-	-
LONGVIEW	2,549,630,132	20,238,121	2,772,495	5,508,208
OLYMPIA	2,753,293,922	18,200,000	441,327	1,000,000
PASCO	759,398,032	9,716,382	323,408	-
PORT ANGELES	1,411,664,855	20,541,890	1,244,240	1,285,150
PORT TOWNSEND	756,518,288	2,435,000	-	-
SEATTLE	45,203,558,073	599,407,600	9,100,000	22,000,000
SKAGIT	1,068,787,919	11,165,457	-	-
SKAMANIA	131,170,377	1,264,175	-	-
TACOMA	8,927,952,330	141,475,606	9,370,868	-
VANCOUVER	2,927,833,862	28,872,565	1,924,114	2,671,305
WALLA WALLA	1,140,450,664	3,200.000	320,000	740,000
WHITMAN	755,420,453	3,645,000	1,882,081	1,882,081
WOODLAND	121,801,053	300,000	200,000	130,797

STATE OF OREGON

OPERATING PORTS

Name	Assessed Valuation	Value Port Property	Annual Tonnage: Over Port Owned Facilities	Annual Tonnage: Port District Total
ARLINGTON	$ 60,812,384	$ 1,500,000	125,000	-
ASTORIA	925,722,147	19,099,092	1,001,071	-
BAY CITY	83,421,850	805,504	100,000	100,000
BROOKINGS	222,274,945	2,520,000	-	-
CASCADE LOCKS	23,000,000	4,000,000	-	-
COOS BAY	827,877,020	10,123,200	178,689	5,230,600
GOLD BEACH	89,658,211	4,500,000	-	-
HOOD RIVER	261,450,322	8,220,000	-	20,000
MORROW	31,096,000	10,120,000	-	-
NEWPORT	291,688,342	2,209,000	-	221,000
PORT ORFORD	27,900,055	150,000	-	-
PORTLAND	23,651,900,223	245,215,483	12,159,735	6,465,037
ST. HELENS	1,078,281,656	4,600,000	-	2,200,000
SIUSLAW	370,387,607	5,600,234	99,375	266,411
TILLAMOOK BAY	227,121,521	6,123,000	-	-
THE DALLES	433,456,330	1,922,513	253,565	299,565
TOLEDO	203,075,852	92,000	-	-
UMATILLA	1,014,714,450	1,047,266	130,823	812,795
UMPQUA	386,000,000	4,000,000	-	-

STATE OF IDAHO

OPERATING PORTS

Name	Assessed Valuation	Value Port Property	Annual Tonnage: Over Port Owned Facilities	Annual Tonnage: Port District Total
LEWISTON	$ 80,600,000	$ 3,624,360	58,690	942,966

STATEMENT OF PACIFIC NORTHWEST WATERWAYS ASSOCIATION

Project or Activity	President's FY 1982 Budget Request Allotment New Funds	 Other Funds 1/ (In Thousands)	 Total Obligations
CONSTRUCTION AND REHABILITATION			
Regular Construction			
Chief Joseph - Oroville-Tonasket Unit	$11,300	$ -	$11,300
Columbia Basin - Irrig. Facilities	17,450	-	17,450
Columbia Basin - Third Powerplant	27,290	-	27,290
Teton - Lower Teton Division	300	-	300
Drainage & Minor Construction			
Boise - Payette Division	30	-	30
Chief Joseph - Whitestone Coulee Unit	355	-	355
Little Wood River	160	-	160
Mann Creek	40	-	40
Tualatin	1,100	-	1,100
Safety of Dams			
Boise - Black Canyon Dam	100	-	100
Minidoka - Island Park Dam	200	-	200
Minidoka - Jackson Lake Dam	500	-	500
Rehabilitation & Betterment			
Yakima - Grandview, Outlook, Sunnyside Valley and Yakima-Tieton Irrigation Districts, and Sunnyside Board of Control	2,959	2,565	5,524
Total - Construction & Rehabilitation	$61,784	$2,565	$64,349
LOAN PROGRAM			
Administration	$ 27	$ -	$ 27
GENERAL INVESTIGATIONS	$ 2,275	$ 200	$ 2,475
GENERAL ADMINISTRATIVE EXPENSE	$ 2,680	$ -	$ 2,680
OPERATION & MAINTENANCE	$24,266	$1,310	$25,576
GRAND TOTAL - ALL ACTIVITIES	$91,032	$4,075	$95,107

1/ Wateruser and State of Washington grant funds.

MAJOR CONSTRUCTION PROJECTS

1. Chief Joseph Dam, Oroville-Tonasket Unit.--The FY 1982 program provides for continuation of construction of the Cordell and Crater Lakes distribution systems, and initiating construction on the Ellisford, Tonasket and Bonaparte Creek systems. Preconstruction work will continue on the Osoyoos system and fish and wildlife proposals.

2. Columbia Basin Project, Irrigation Facilities.--The major work underway and continuing into FY 1982 are the pump generating units 9, 10, 11 and 12 at the Grand Coulee damsite. These units are scheduled to be completed in FY 1983. Construction of the Block 26 Lateral system will be initiated in late FY 1982. Work will be reinstituted on the Franklin D. Roosevelt Lake fish and wildlife study under authority provided by the Fish and Wildlife Coordination Act. Preconstruction activities on the Deferred and Bypassed Lands and East High Irrigation System will continue. Construction of drainage, deferred and supplemental minor items will continue.

3. Columbia Basin Project, Third Powerplant.--The fiscal year program provides for continued work on the riverbank stabilization and minor completion work on the powerplant and switchyard. Modifications to integrate the visitors facilities will be performed in FY 1982.

4. Teton Project, Lower Teton Division.--Funding is requested in FY 1982 to continue the administration of Federal lands that were acquired for project construction.

DRAINAGE & MINOR CONSTRUCTION

Included in the drainage and minor construction category are; Boise Project, Payette Division - preconstruction work on minimum basic health and safety facilities at Cascade and Black Canyon reservoirs; Chief Joseph Dam Project, Whitestone Coulee Unit - installation of a weed screen at Toats Coulee diversion works, replacement of a section of Spectacle Lake laterals and other minor rectification work; Little Wood River and Mann Creek Projects - construction of minimum basic health and safety facilities; and Tualatin Project - to continue repair work on the Henry Hagg Lake perimeter road.

SAFETY OF DAMS

The Safety of Dams Program includes preconstruction activities on Jackson ake Dam, Black Canyon Dam, and Island Park Dam.

REHABILITATION & BETTERMENT

Rehabilitation work will be initiated on the Grandview, Outlook, Sunnyside Valley, Yakima-Tieton Irrigation Districts and the Sunnyside Board of Control facilities of the Yakima Project.

OPERATION & MAINTENANCE

Operation and Maintenance Program covers the operation and maintenance of power facilities, irrigation facility reserved works and other miscellaneous related programs. Projects include - Boise Area, Idaho; Columbia Basin, Washington; Crooked River, Oregon; Hungry Horse, Montana; Minidoka Area, Idaho-Wyoming; Rogue River Basin, Oregon; Tualatin, Oregon; Umatilla, Oregon; and Yakima, Washington.

GENERAL INVESTIGATIONS

The General Investigations program includes one appraisal study, eight feasibility studies and five special studies. Of these studies, three relate to added power generation at existing facilities within the Region; three are primarily directed at fish enhancement; two are related to basin-wide water uses; one is water conservation oriented; and two are multipurpose project studies. This program also includes funds for program coordination with the states and other Federal agencies in the irrigation, power and water resource fields.

The specific projects and FY 1982 amounts are as follows:

PLAN FORMULATION INVESTIGATIONS	President's FY 1982 Budget (In Thousands)
Appraisal Investigations	
Idaho Anadromous Fish Habitat Restoration Study................	$ 300
Feasibility Investigations	
Boise Project, Idaho-Oregon - Power and Modification Study.....	125
Hungry Horse Project, Montana - Hungry Horse Powerplant Enlargement and Reregulating Reservoir.........................	250
Rogue River Basin Project, Oregon - Grants Pass Division.......	100
Rogue River Basin Project, Oregon - Medford Division (Reformulation)...	65
Umatilla Basin Project, Oregon................................	115
Upper John Day Project, Oregon................................	100
Yakima Project, Washington - Cle Elum and Tieton Powerplants...	100
Yakima River Basin Water Enhancement Project, Washington.......	300 1/

1/ Includes $200,000 in State of Washington grant funds.

Special Investigations

Environmental and Interagency Coordination Activities..........	315
Hermiston Water Conservation, Oregon..........................	110
Minor Work in Connection with Completed Project Investigations..	136
Technical Assistance to States................................	280
Upper Snake River Water Management Study, Idaho-Wyoming........	179
TOTAL..	$2,475

GENERAL INVESTIGATIONS - CONTINUING STUDIES

Columbia River & Tributaries, ID, MT, OR, and WA

FY 1982 Budget Amount	$ 1,050,000
Additional Recommended for FY 1982	$ 500,000

The Pacific Northwest is dependent to a large extent upon the Columbia River for its power, food, and fiber through irrigation, transportation through navigation, recreation, fisheries, and to a lesser extent, municipal and industrial water supply. No other single resource in the Pacific Northwest influences the character and way of life of people in the region as much as the Columbia River and its major tributaries. The Columbia River and Tributaries Study (CR&T), in FY 1982, will continue its investigation of potential new projects and programs to supplement the entire system and the formulation of a system plan to insure that the Columbia River and its tributaries will be operated and managed in an optimum manner and in the best public interest. Several studies have been completed which recommend developments that will provide significant contributions to the public welfare of the region; including the addition of power at Libby Reregulating Dam, McNary Second Powerhouse, Bonneville Navigation Lock, addition of power at Lucky Peak Dam, and Yakima-Union Gap Flood Control.

Although hydropower still provides over 80 percent of the region's power needs, the major part of future base energy needs will have to be supplied by large thermal generating plants with peaking capacity furnished by conventional hydropower plants. New sources of peaking capacity must be found. An encouraging prospective source for this added capacity is pumped-storage. The topography of the Pacific Northwest is unusually favorable for the development of pumped-storage where literally hundreds of potential sites exist. At the direction of Congress, the Corps has completed a screening study of potential pumped-storage sites in the Pacific Northwest. That study identified eight sites as having the highest potential for early consideration as pumped-storage projects. The first step in implementing the recommendations of the screening study, has been to undertake a detailed feasibility study of the potential Jordan Creek Pumped-Storage Project. The Jordan Creek study is scheduled for completion in FY 1982. The Association strongly supports the Corps' continued investigation of the feasibility of pumped-storage in the Pacific Northwest.

There have been times in the past when the water resource of the Columbia River system appeared to be unlimited. It is becoming evident, however, that with the existing level of development of 43.5 million acre-feet of storage, the Columbia River system will be unable to completely satisfy the many diverse and increasing demands placed upon it. Conditions of shortage like 1977 will be felt with increasing regularity. Recognizing this fact, the CR&T Study is pursuing the investigation of storage development in the Columbia River Basin. During FY 1982, detailed feasibility studies will be underway on at least two separate conventional storage sites in the Columbia River Basin.

The Pacific Northwest Region is currently energy deficient. It is only because of adequate water supplies and relatively mild winters that the Region has recently avoided energy deficits. Under critical water supply conditions, the Pacific Northwest Region does not have adequate energy resources to meet all of its demands. To partially respond to this growing problem, during FY 1982 the CR&T study will investigate the feasibility of developing energy projects in the Wenatchee River Basin.

PNWA has had a long-standing interest in extending Columbia River navigation from the Tri-Cities area to Wenatchee. Various options of providing navigation extension have previously been investigated. To fully extend navigation to the Wenatchee area would require the installation of locking facilities at the three existing dams of Rock Island, Wanapum, and Priest Rapids, and providing navigation through the unimpounded Hanford reach of the Columbia River. Certainly, the first step in extending navigation to the Upper Columbia River area is providing navigation through the critical Hanford Reach of the Columbia. In response to this fact, the Corps of Engineers has expressed capability in FY 1982 as part of its ongoing Columbia River & Tributaries Study, to initiate study on the feasibility of the Hanford Spawning Preserve and Canal. The project would allow for barge access to the vital Hanford nuclear/industrial complex, as well as providing recreational opportunities, anadromous fish spawning, wildlife enhancement, and hydropower generation.

PNWA strongly urges that funds in the amount of $500,000 be added to the FY 1982 budget request for the Columbia River and Tributaries Study. These funds would allow initiation of studies for: adding multiple level intakes at Detroit Dam, developing additional storage in the Columbia River Basin, and developing the Hanford Spawning Preserve and Canal.

Upper Snake River & Tributaries, Idaho & Wyoming

FY 1982 Budget Amount	$ 500,000
Additional Recommended for FY 1982	$ 820,000

The Upper Snake River & Tributaries study encompasses an area extending from the headwaters of the Snake River in Wyoming down to and including the Powder River in Oregon, a distance of about 450 miles. The watershed includes about 73,000 square miles, most of which is in southern Idaho. Water resource problems are associated with uses of surface and groundwater in the interest of flood damage reduction, water quality, hydropower, irrigation, public water supply, low-flow regulation, fish and wildlife, and recreation. The upper Snake River and Tributaries Study, in FY 1982, will continue its investigation of potential new projects and programs to respond to the critical water resource needs of the region.

The water resource of the Upper Snake is becoming more precious as increasing diverse demands are placed on it. The harsh realities of water shortages were imposed on this region in 1977. In recognition of this, the study will continue Weiser River Basin and off-stream storage studies, complete the Clear Springs low head hydropower feasibility study and initiate an analysis to update cost and benefit data for the Twin Springs storage site located on the Boise River. The Weiser River Basin study will involve continuation of consideration of major reservoir storage on the main stem for the primary purpose of power and stream flow augmentation. In response to a request from the Idaho Department of Water Resources Director, studies will be undertaken to review the hydropower generation capability of the Twin Springs site as it relates to the proposed powerhouse at Lucky Peak, as well as investigating present requirements for down stream flood control, water supply, and other water resource needs.

PNWA strongly recommends additional FY 1982 funds in the amount of $820,000 to advance completion of Weiser River Basin report; advance completion of the Twin Springs study; complete reconnaissance studies for off stream storage sites; initiate detailed studies of Shelley low head projects; initiate and complete reconnaissance study at a low head hydropower site on the Snake River in the vicinity of Heise, Idaho; and initiate study of Teton River, Idaho.

GENERAL INVESTIGATIONS - CONTINUATION OF PLANNING & ENGINEERING STUDIES

Bonneville Navigation Lock, Oregon & Washington

FY 1982 Budget Amount	$ 0
Amount Recommended for FY 1982	$ 3,400,000

This project consists of a new navigation lock at Bonneville Dam on the Oregon shore, south of the existing lock and powerhouse. The new lock chamber would have horizontal dimensions of 86 feet by 675 feet, matching the dimensions of the seven other locks on the Columbia-Snake River Navigation System. The new lock would have a depth of at least 15 feet over the lower lock sill. Both an upstream and downstream approach channel would be constructed having vertical concrete guidewalls.

Operation of the proposed navigation lock would result in faster, more efficient movement of tows and barges through Bonneville Lock. The improved lock alignment would add a measure of safety for barge tows and other water craft approaching Bonneville Lock. The Columbia-Snake River Navigation system could then be utilized to its full potential.

The Association urges Congress to expedite authorization for the construction of this project and appropriate funds totaling $3,400,000 in FY 1982 for the General Design Memorandum.

McNary Lock & Dam, Second Powerhouse, Oregon and Washington

FY 1982 Budget Amount	$ 1,700,000
Additional Recommended for FY 1982	$ 1,500,000

This project consists of modifying McNary Lock and Dam by the addition of a six-unit second powerhouse to the south end of the existing powerhouse. The units will each have a generating capability of almost 124 MW (107.5 MW name plate) for a total added capacity of 742 MW. The project will also include levee access and beautification in the Pasco-Kennewick-Richland area, relocation and improvement of visitor facilities located near the power plant, and protection of existing recreation facilities and fish and wildlife habitat on McNary Reservoir.

Early completion of the McNary Second Powerhouse will provide needed peaking capacity for the Pacific Northwest Power System to serve load requirements in the late 1980's and thereafter. Average annual power benefits from this project are estimated to be $88,180,000.

PNWA urges Congress to expedite authorization for this project and appropriate funds in FY 1982 to complete the General Design Memo. The Corps has indicated a FY 1982 capability of $3,200,000 for this work.

Rivergate-North Portland Area, Oregon

FY 1982 Budget Amount	$ 0
Amount Recommeded for FY 1982	$ 250,000

The recommended plan would provide flood protection, recreation, and fish and wildlife enhancement for the Rivergate-North Portland Area. The Plan consists of completion of a perimeter levee, part of which is already constructed, connecting it to adjacent levee and high ground. That levee also would provide added flood protection to Peninsula Drainage Districts Nos. 1 and 2 by excluding Willamette and Columbia Rivers backwater from Columbia Slough. The plan includes passive recreational development and fish and wildlife habitat improvement.

The feasibility report was completed in January 1976 but the project has not been authorized because the recommended plan violates the policy established in 1976 by Assistant Secretary of the Army Veysey that the addition of recreation to a local protection project could not increase total project costs by more than 10 percent. PNWA urges that this issue be resolved at an early date and that the project be authorized and that $250,000 be appropriated in FY 1982 for the General Design Memorandum.

GENERAL INVESTIGATIONS - CONTINUING AE&D

Bradley Lake, Alaska

FY 1982 Budget Amount	$ 474,000
Additional Recommended for FY 1982	$ 266,000

The project location would be near the head of Kachemak Bay near the southwestern end of the Kenai Peninsula, Alaska about 25 air miles east of Homer, Alaska. The plan of improvement provides for construction of a main dam and spillway at the existing lake outlet, two small diversion dams, outlet works, and a penstock carrying the stored lake water to a powerhouse which would be constructed near tidewater. The project would provide 118,000 KW of dependable capacity and generate 322,000,000 KWh of firm annual energy meeting the Cook Inlet area power needs of the 1980's. The average annual benefits are estimated to be $20,400,000.

PNWA urges that funds in the amount of $266,000 be added to the budget request for Bradley Lake to provide for the continuation of pre-construction planning in FY 1982.

CONSTRUCTION, GENERAL - NEW CONSTRUCTION STARTS

Bonneville Power Units, Oregon and Washington

FY 1982 Budget Amount	$ 0
Amount Recommended for FY 1982	$ 9,500,000

The proposed plan of improvement to the existing Bonneville Project consists of two energy efficient improvements, the uprating of the existing units 1 & 2 and the addition of three small hydro-turbine generator units to the first powerhouse's fish attraction water system. (Two similar units are currently being constructed at the second powerhouse fish attraction water system under the Bonneville 2nd Powerhouse project.) Currently there are three separate gravity fed fish attraction water flows at the existing Bonneville project, one at the north end of the first powerhouse and one each at the north and south end of the existing spillway dam. Installation of small units at each of these locations would develop the energy which is currently lost. Work would include modifications to the existing service unit draft tube so it would discharge into the existing fish attraction water system. Suitable bypass provisions would be made to provide flow when the units are not operational. The installed capacity of these three new units would be 11,600 KW and would generate an estimated 67,000 MWH of energy annually.

The existing units 1 & 2 are smaller than the other units at the first powerhouse, and are suitable for uprating, which will allow the units to generate more power for the same amount of water flow. The combined capacity of Units 1 & 2 would increase from 95,000 KW to 124,982 which would provide an increase of 29,982 KW of peaking power. The uprating work consists of increasing the diameter of the turbine shafts, providing new generator and rotor windings, increasing the transformer size, adding electronic governors, increasing air cooler capacity and replacement of necessary instrumentation and excitation equipment.

PNWA urges that $9,500,000 be added in FY 1982 to initiate construction. The benefits derived from this project are estimated to be $3,777,000 annually.

Snettisham, Unit 3, Alaska

FY 1982 Budget Amount	$ 0
Amount Recommended for FY 1982	$ 4,400,000

The existing Snettisham project is located approximately 50 miles SE of Juneau, Alaska and consists of a 8,230-foot-long power tunnel and 1,400-foot-long penstock from Long Lake down to an under ground powerhouse at tidewater. The powerhouse currently has two units of 23.35 MW each for a total of 46.7 MW.

The plan of improvement for the Snettisham, Unit 3 project consists of constructing a 6,100-foot-long power tunnel and a 1,590-foot-long penstock from Crater Lake to the existing underground powerplant, installation of one additional generating unit with a capacity of 27 MW in the powerhouse, and construction of 5,600-foot-long access road to the gate structure near the lake.

This additional power from this 3rd unit at Snettisham will be required to meet the power needs of the Juneau power market area in the 1980's. Benefits derived from this project, which are all power, are estimated to be $23,350,000 annually.

The Corps has expressed a full funding capability of $67,780,000 to initiate and complete construction with first year costs being $4,400,000.

PNWA strongly recommends that funds in the amount of $4,400,000 be added in FY 1982 to allow a construction start for this project.

Strube Lake and Cougar Additional Unit, Oregon

FY 1982 Budget Amount	$ 0
Amount Recommended for FY 1982	$ 4,500,000

The plan of improvement provides for construction of a reregulating dam consisting of an earth and gravel embankment, gate controlled spillway section, and power plant with capacity of 4,600 kilowatts. Modifications to the existing facilities at Cougar would consist of expanding the powerhouse and adding penstock and a 35,000 kilowatt unit. The proposed Strube Lake project would provide 3,000 acre-feet of usable storage for reregulation of discharges from the Cougar power plant.

This project would provide peaking capacity and energy for the Pacific Northwest Power System to help meet continually growing power needs. Average annual benefits from this project are estimated to be $7,343,000.

The Corps has expressed a full funding capability of $95,225,000 to initiate and complete construction with first year costs being $4,500,000.

PNWA strongly recommends that funds in the amount of $4,500,000 for FY 1982 be added to the budget to allow a construction start.

SMALL PROJECTS PROGRAM

East Bay Small Boat Harbor, Washington
(Section 107 Project)

Amount Recommended for FY 1982:	Plans and Specifications	$ 55,000
	Construction	800,000
		855,000

The final Detailed Project Report/Environmental Impact Statement was forwarded to Office of Chief of Engineers in January 1981 for approval for construction and funding for plans and specifications. The report recommends construction of a small boat marina at East Bay, Olympia, WA. The Federal project would include entrance and access channels to the moorage area, a floating breakwater, and participation in recreational facilities on the breakwater. First cost to the Federal government would be $1,396,000. Port of Olympia is the local sponsor.

The 800 spaces to be provided by the proposed marina would meet a portion to the estimated 5,000 additional moorage spaces needed in southern Puget Sound area.

FY 1982 capability would be used to complete plans and specifications and initiate construction.

Kenai Small Boat Harbor, Alaska
(Section 107 Project)

Amount Recommended for FY 1982:	Detailed Project Report	$ 187,000

The project being considered for Kenai is a full-tide dredged harbor covering a 20-acre area. The mouth of the Kenai River presently serves as the only harbor in the area. As many as 250 boats now moor in the channel regularly during fishing season. The resulting congestion results in delays for boats passing through the channel and damages to moored boats. Public dock, repair, and refueling facilities are virtually non-existent. The proposed harbor would satisfy these needs. The State of Alaska has funded a harbor feasibility study for Kenai and it is currently underway by the City of Kenai. The initiation of detailed project studies by the Alaska District Engineer has been delayed pending outcome of that study.

FY 1982 capability would be used to initiate detailed project studies.

BUDGET SUMMARY

Senator STENNIS. You can proceed now to emphasize such points as you wish.

Mr. LINDSTROM. Thank you, sir. First, I would be remiss if I neglect to thank you for the opportunity to appear before this subcommittee. It is always an honor and a pleasure for us to visit with you. We have been coming here since 1934 on behalf of projects in the Pacific Northwest and recently have added Alaska to our region of interest because of so many mutual interests.

The statement that we have submitted in written form speaks to strong support for the budgeted levels for the Bonneville Power Administration which is self-funding, but requires specific congressional approval for the Surprise Valley area service plan in the Pacific Northwest region and the North Pacific Division of the Corps of Engineers.

Especially in view of the Corps budget, we are concerned that sufficient moneys be there for operation and maintenance of existing projects. We have seen a couple cases where insufficient maintenance has led to the breakdown of locks and hydraulics had to be operated by hand and brought delays to the two boating industry and commercial interests on the river. So we are interested in seeing that both the 1981 supplemental and fiscal year 1982 budget contain sufficient moneys for that operation and maintenance.

We are also concerned that the Corps continues to get sufficient funding for the cleanup of the Mount St. Helens disaster. It did block the shipping channel for several days and the Corps is still digging out both in the navigation stream of the Columbia River and in the floodways of the rivers. We are requesting that that additional money be made available.

Speaking of some specific projects, we took a look at 71 projects that the Corps expressed additional capability in beyond the budget. We got out our paring knife in the spirit of the times and cut that back and only mention nine, for a total of $25,136,000 noted here on page 7, sir. I will mention them briefly. Most of them are studies. There are three new starts, all of which would add hydropower at existing facilities. So there is no negative environmental impact, there is no timing problem. It is just a matter of putting additional capacity to existing projects. Those are at Bonneville, at Snettisham Strube, and Cougar, the general investigation design activities on the Columbia River tributary study, the upper Snake River tributary study, the new lock on the Bonneville Dam, McNarey second powerhouse, Rivergate flood control in Portland, and Bradley Lake in Alaska.

I think even in these austere times it is important that the Corps be permitted to continue some of these studies for two reasons. The first is, when times get better the Corps then will be in a position to construct these projects themselves, but regarding certain hydropower projects, if it is decided that the federal establishment wants to deemphasize its involvement in these, the studies will already have been done and the permission can be given, to non-Federal entities to persue them without undue further delay. So that is why we offer these modest suggestions to the fiscal year 1982 budget for the health and continued vitality of our region.

I would mention as a footnote that we are interested in a little bit of money in the pot for the section 107 small projects, especially to the benefit of the East Bay marina project in Olympia, Wash., and the pressing needs for a fishing small boats harbor at Kenai, Alaska. There are several others important on the coast of Alaska to developing a little independence in the processing of fish for America. We are so dependent on the foreign processers in our 200-mile zone that this would be one small foot in the door to help upgrade our own industry and reduce the balance-of-payments deficit in that regard.

With that I will close my remarks, and I appreciate very much your taking the time to hear us out and hope that our endorsements will fall on favorable ears. I would be delighted to answer any questions you may have, Mr. Chairman.

Senator STENNIS. Well, we will certainly review this. Some like to say God helps those who help themselves.

Mr. LINDSTROM. We do, too. Some of my predecessors left quite a lot of work to do.

Senator STENNIS. Well, it is a great opportunity, a great challenge to you.

Let me ask you a question now. We hear complaints from people who don't have the facts about spending money all the time but where would you people in the West be now if it weren't for your water projects, what you have done there in the last 40 to 50 years?

Mr. LINDSTROM. We would be up a dry creek without a paddle, there is just no doubt about it. There has been a marvelous cooperative effort between Federal and non-Federal entities. The total Federal investment in the region has been $6 million since Mr. Rooselelt started Grand Coulee. The return to the Federal Treasury has been in excess of $21 million, so that is almost a 3½-to-1 benefits-cost ratio, on all projects, not just revenue-producing ones. So we are very proud of that. It has enhanced the vitality and livability of our region.

Senator STENNIS. Well, a lot of that region is served almost exclusively by these very projects that you are talking about, for your power, that is.

Mr. LINDSTROM. They are the lifeblood of our region. There is a tremendous Federal investment there. We feel that level of investment has been well justified and well repaid.

Senator STENNIS. Well, I have been out to Coulee, I followed the river, as you know, the Columbia River, trying to get to the mouth of it. I remember the Snake River, that is one of the tributaries, we stopped there, and so forth. But it is unbelievable to a stranger what all you have done out there.

Where is your office?

Mr. LINDSTROM. In Vancouver, Wash., sir. We used to be in Walla Walla, up in the inland area, but our coastal issues have achieved such problems we thought it would help to be a little more centrally located so we moved a couple of years ago.

Senator STENNIS. We have pretty near stopped growing pine trees down where I live. We cut out most of the original timber, we didn't think it could all be cut down, but it finally was.

Mr. LINDSTROM. You have produced some real competitive influences to the Northwest timber. Some of our people had to rethink their management because of the Southern pine impacts on the Eastern markets.

Senator STENNIS. We didn't start in time, but I know most people, well, many who made money out of the virgin pine left.

Mr. LINDSTROM. They didn't take the time to come in behind and reforest.

Senator STENNIS. That is right, they didn't plant ahead. Now, though, Weyerhauser is one of the most active ones.

Mr. LINDSTROM. They took a lesson, didn't they?

Senator STENNIS. Yes, Georgia Pacific went to the West and now HAS come back home.

Mr. LINDSTROM. You have that fast growth loblolly species now that is really turning a crop around.

Senator STENNIS. A most superior loblolly.

Mr. LINDSTROM. As loblollies go, it is superior.

Senator STENNIS. You know, things like the President getting shot yesterday brought things back to my memory and one or two things I can name about myself. I got shot once myself and I was unconscious a good while. The first thing I remember anyone talked to me about where I was able to respond, the word came from home that Mr. Nestor wanted to know if I wanted him to go on and set out those pine seeedlings.

Mr. LINDSTROM. First things first.

Senator STENNIS. The time had come, while I was in the hospital, and every night he heard on the local radio there that I wasn't expected to live, so he didn't want to lose the seedlings, you know, he had held them out. That is the way I tell it to him, anyway.

Well, you know, I said "Plant them, plant them; they'll do somebody some good." So he did. And that was a little 4-acre patch. And it is a showplace now, 8 years old since February that he put them out, and they were fine specimens, super trees, we call them. But anyway, it made me remember, you see, putting out the pine seeds.

Well, I want to come back to the West. I would just like to show up at your office and you can take me around.

Mr. LINDSTROM. We would be delighted. We have a smorgasbord of delights.

Senator STENNIS. Jackson Hole country, I have been there. I believe that is on the Snake River.

Mr. LINDSTROM. It is right on the breaks of the Snake up in the corner of Wyoming; yes, sir.

Senator STENNIS. That is tremendous, tremendous. I went to several of these projects, stayed around a day or two.

Mr. LINDSTROM. They just keep growing. Grand Coulee now is the largest single producer of electricity in the world with the addition of the third powerhouse. It is a sight to behold.

Senator STENNIS. Well, I got up in there and saw some sheepherders. They were coming down off the mountains. They had been up there grazing their sheep all the summer and were coming down for the winter. This was September when I was out there. And I thoroughly enjoyed them. I stopped, you know, and talked with them. The people there, the Corps of Engineers, I could talk to them better than they could because I lived in the country, you see. I remember one—we just had a big time.

Anyway, it is a great country, great project.

Well, I am mighty glad to see you.

Mr. LINDSTROM. Delighted, sir.

Thank you, Senator.

Senator SASSER. Good luck to you.

All right, gentlemen, who do we have next now?

MILLICAN LAKE PROJECT, TEXAS—OPPOSITION

STATEMENT OF COULTER HOPPESS, PRESIDENT, NAVASOTA RIVER IMPROVEMENT ASSOCIATION

ACCOMPANIED BY W. W. HUMPHRIES, SECRETARY TREASURER

Senator STENNIS. Come around, gentlemen.

Well, we are glad to have you here again.

Mr. HOPPESS. Yes, Senator.

I am Coulter Hoppess from Bryan, Tex., and this is Mr. W. W. Humphries from Bryan. We are the opposition to the Millican Lake project.

Senator STENNIS. That is where Texas A. & M. is.

LIGNITE DEPOSITS

Mr. HOPPESS. We are on the Navasota River. We are in opposition to what the Brazos River Authority wants to do, and we have a remarkable story to tell you.

You talked about lignite. Well, we came before this committee in 1975 and advised this committee that there was substantial deposits of lignite of a quality suitable for use that underlay the entire basin of this proposed Millican Dam. And the Corps of Engineers denied it, said it wasn't there. Well, we knew that it was, we had seen it. So we kept pressing until the Congress of the United States insisted that the Bureau of Mines come there and make a study, and they did, and in 1976 they reported finally that there was an abundant supply of lignite that lay in this reservoir area, and all through the whole area.

Now, then, Senator, we used the adversary system in this country, we depend upon it for our entire development. We have a meeting in adverse positions to get at the facts. As a result of our efforts, and I can assure you, sir, that had we not done that, that reservoir would have been built and that land would have been flooded. We now have a 350-kilowatt steam electric generating plant using 20,000 acres of that coal established, the plan is 90 percent complete, it will go on-stream in 1982. It furnishes cheap electricity to the cities of Bryan, Garland, Denton, and Greenville. And I can assure you, sir, that it is built right in the bottom of the reservoir and the coal is there that would have been inundated by the Millican Reservoir. That is the truth and the fact of the matter and it can be confirmed. The Texas Municipal Power Agency went in there and built it.

OIL AND GAS RESERVES

Now, then, we came here as early as 1965, Senator, and we advised the Congress of the United States that there were large reserves, unproduced reserves of oil and gas throughout this entire area that was to be flooded, and we had the geologic information to back us up. The Corps again denied this. The Bureau of Mines made a report and said there was no significant oil and gas reserves located in that area, and the reason they did, they hadn't had anybody drill any holes. But this oil and gas was trapped at a depth of about 9,000 feet and it was in a very hard type formation.

Our technology at that time and the price of a barrel of oil was such that it made it uneconomic to go in there and produce. But we believed that it would be produced. Comes 1973, the Organization of Petroleum Exporting Countries, bless their hearts, put the business to us. People come in there and start looking. Two years ago we brought and filed with this committee a map showing 120 producing oil and gas wells that would be affected by the impoundment proposed.

Today, Senator, that amounts to more than 250 wells. That area today is producing over 500,000 barrels of oil a day. A barrel of oil in Brazos County, Tex., even after paying the windfall profit tax, is worth $30 a barrel, and I can assure you that one Friday afternoon 3 weeks ago in the Robertson Field, the Leon Field, and the Brazos County Field, there were 102 drilling rigs operating. Ten percent of all the rigs operating in Texas were right there in that little area.

Now, that wouldn't all be inundated, don't misunderstand me, but what the Corps is trying to do right now is find someplace that they can put in a reservoir that will not interfere or will not be overwhelmed by the existence of this oil and gas. They make statements to the effect that this is a short-term field, it is not going to have a long life by the time they are ready to inundate it, that it will have exhausted itself. Now we don't believe that to be true. We believe that they are mistaken in that assumption.

The Texas Railroad Commission, which has charge of all the supervision and regulation of all oil and gas production in Texas, had two men come and talk to me here just a week ago and tell us that this will not be a short-life field, but on the contrary, it will still be drilled out and the remnants of oil by new-discovery tertiary methods will be going on 25 years from now in the Leon County, Robertson County, Brazos County, Madison, and Grimes Counties.

It is a cluster right there. The Oil and Gas Journal, numerous newspapers have referred to it as the most significant oil and gas strike on the North American Continent since the North Slop in Prudhoe Bay.

Now, just to be real formal about the matter, we endorse the goals and determinations of the present administration and the Office of Management and Budget to reduce Federal expenditures in order to reduce and control inflation and to eventually achieve a balanced budget. That is our formal way of saying that we think this $209,000 could be spent better somewhere else.

Mr. Humphries will tell you about how long we have been coming here, and steadfastly, I mean steadfastly, directing the attention of this committee to useful facts. We are not emotional, we come here with facts and every one of them have proved to be remarkably accurate and remarkably beneficial to the Nation as a whole as well as to that local area.

We sure do appreciate the time and visit with you, Senator.

Senator STENNIS. That is good. Ordinarily these projects we deal with it is a matter of developing them and we don't have this adversary development there.

ALTERNATIVE PROJECT DEVELOPMENT

Mr. HOPPESS. We have attempted to urge the Brazos River Authority and the Corps to go further up the river, which I can understand their point of view. They want, the Corps and, of course, the Federal presence has always thought in terms of flood control. Well, the further downstream you go, the more water you can control, that is very logical. But we have insisted, "Look fellows, we are going to have to look at this thing in a different way in order to work out something that is reasonable and that is the best for this area." And we are not talking about what might be best for Houston, Tex. We don't live in Houston; we live 100 miles north of Houston. We are talking about what is best for Bryan and College Station, and our responsibilities to the Navasota River Improvement Association don't go to the whole Brazos River basin. We are limited to one area.

Senator STENNIS. Well, what do you think about the chances to settle the situation there where you can supply your needs and others' needs, too?

Mr. HOPPESS. I don't know, it looks like we can't get together. We have made a good many runs at it, but in all candor, putting all the cards right out here on top of the table, we were notified about a year ago—well, first let me say this: There is no such thing as the Millican Dam or the Millican Lake anymore. That was abandoned and forgotten 6 years ago.

At the present time, we were informed by the District Engineer of the Corps of Engineers in Fort Worth that the Corps is studying three sites—one called Panther Creek, one called Ferguson No. 3, and then we learn from other sources, or we learn from the Corps that the furthest upstream is called Bundic Crossing.

Now, we believe, perhaps erroneously—and I certainly would not want to misrepresent anything—that the upper site, the Bundic Crossing site had perhaps been suggested not as a site, but perhaps our Congressman Phil Graham, whom we are really proud of, he is doing a splendid job for the Nation, as well as his district, and he is a splendid individual, we are real proud of him, we thought maybe he had suggested that the Corps might look a little further up, not to say that he was trying to put it in. I certainly wouldn't imply that.

Anyhow, our group, we got all our folks together, we had a meeting, discussed it, and we came out and wholeheartedly endorsed the upper site and we filed a copy of it here with this committee of our resolution, and we had our board of directors all individually sign it. Unfortunately the Brazos River Authority 2 weeks later met and they endorsed construction of the Panther Creek site, which is the furthest downstream. That is the one we think would create the most damage. So here we are, head to head again. I mean these are the facts, that is the way it is.

Senator STENNIS. Well, I hope you can find a way——

Mr. HOPPESS. Just a bunch of hard-headed folks down there.

Senator STENNIS. Let's see what Mr. Humphries has to say here. That bell is going to ring.

Mr. HUMPHRIES. I just want to say this, Senator. I have been coming to this committee since 1958, with the exception of probably 2 years. Thank you for listening to me. I live on the land. My land is some of the land that is going to be inundated if either of these lakes is built. I would like to say to you there is coal under that land, there is oil under all of it, and it is all under lease for oil. We are struggling, asking this group, as we always have, to move upstream and build a lake and protect this resource that is tremendously valuable to the local people and to the Nation at this time. Just move upstream and we will be with you, we will come up and ask you to fund it.

Senator STENNIS. Well, sometimes they find a way to do it. I certainly hope you can. We have a situation in Mississippi, we don't have extensive oil like you have, but we have an area of oil they found in Tallahala.

Mr. HUMPHRIES. Senator, I live in the country, I live on Wykes Creek, up on the hill, and right down Wykes Creek from my house, another fellow lives who just brought a well down. It will be 15 to 20 feet under water if they build this, bringing in 1,000 barrels a day. And these words come directly from this railroad commission representative that met in our community just a week ago. He told us what the wells make, it is not hearsay. He said the best well in the field is making 1,000 barrels a day. So these are real things that we are talking about. We don't need to go cover up this well. I just don't see how you can build it in the first place, the land is so high in that country. Since we came up there in 1958, we were talking about land at $60 to $100 an acre. It has increased 50 percent. There is not an acre of land in Brazos County, I don't believe, you can buy for $1,000. This site is going to cost $1,500 an acre.

Senator STENNIS. I know enough about land to know that is high-priced land.

Mr. HUMPHRIES. This land with oil and coal under it is going at a tremendous price. Well, I know its surface, I mean 87 acres sold for

$1,750 an acre and half of it is in the river bottom, just for the surface. So that is a demonstration of what the land costs.

Mr. Hoppess. Senator, I'll tell you one thing, I give you personal guarantee on it, deposit in escrow, whether you live in Mississippi or whether you live in Texas, these independent oil operators, independent companies with the backing that they are able to get now will locate, drill, find, and produce every barrel of oil in the United States and every thousand cubic foot of gas in the United States, and you know it, and I know it, because we have to have it. We can't sit here and let our destiny—I mean we can't sit here and let the ultimate destiny of this great country be dictated, financially dictated by somebody that lives over on the tail end of the Mediterranean Sea.

Now, Senator, we are not going to do it, sir. I am just telling you, sir, we are not going to do it.

Senator Stennis. I like the way you talk about it. I found out it is a reality of life, found it out right here on this subcommittee. I just woke up to it.

Mr. Hoppess. Yes, it has gotten to the point if we don't do something about it, it is going to be like good sweet milk when I was a boy. If you didn't own a cow, you didn't have any milk. There wasn't any dairies. It is about to the point if you don't own an oil well, you are not going to drive a car. You better believe this old man, I am telling you the truth.

Senator Stennis. Well, I may use that term in debate. If you don't own an oil well, you better not buy a car.

Mr. Hoppess. That is exactly right.

Senator Stennis. The Japanese want us to make an agreement with them, something about buying their cars, you know. Well, what do you think, what is the supply of oil and gas? How long do you think it will last?

Mr. Hoppess. You mean in this immediate area?

Senator Stennis. No, I am talking about the U.S.A.

Mr. Hoppess. Senator, I am not in the oil and gas business, I am just a country lawyer, that is all I am, sort of a nutty sort of fellow. But just commonsense will tell you, like we came up here and told a committee that this oil and gas existed. Well, they said, "How did you know it?" There had been 45 wells over a period of 20 to 30 years, going back as early as the 1920's. There had been numerous wells drilled in this area that would produce a little oil and a lot of gas, and they would have to cap those wells because of the natural gas.

Now, remember, if you are not closely related to this——

Senator Stennis. No, I don't know anything about it.

Mr. Hoppess. If you are not closely related to this, here just 6 years ago we were selling natural gas for 15 cents a thousand cubic feet. That is what it brought at the wellhead. Yes, now I am telling you the truth, 15 cents a thousand cubic feet a day. Under the regulations today that exist, deep gas, which is 12,000 feet below, you know what they can get for it? $7.50 a thousand cubic feet. You think oil has gone up? Arkansas-Louisiana Gas, I read the annual report within the last week, they have gas wells all over Oklahoma, east Texas, Arkansas, Louisiana, they service Shreveport, they service Little Rock, Ark., they service an area that you are very familiar with. They are progressively raising their contract price. All their contracts have run out, that is the reason I bought their stock. They are raising their prices of gas 15 cents a thousand cubic feet every 3 months for the rest of this year and into 1982 until they reach $3.35 a thousand cubic feet. Well, we are going to pay Mexico what, $4.20? We have contracted to pay Mexico $4.20. That is the price of natural gas.

Now, then, how does this apply? How do we know this? It used to be in our country when you hit gas, you would rather hit water. I mean, really, gas was the worst thing that could happen to you because you have to leave the pipe in the hole and cap it. All they had to do when gas went to a dollar a thousand cubic feet is just go out and take the well and torch it, cut the cap off and let her go.

In 3 years, and I did a great deal, represented numerous landowners in the condemnation proceedings on these gas transportation lines, they have the right of eminent domain in Texas. We have had three major transporting gas lines constructed in this area right here we are talking about that will be flooded, Clayjon Gas Transportation, which is Clayton Williams, and Lone Star Gas, of course, which is one of the biggies, it was originally Lone Star Gas. They have put a pipeline through there, sir, that you wouldn't believe. If it ever explodes, and some day it will, it will be like Hiroshima. Thirty-six inch gas line, 1,200 pounds of pressure to the inch.

Mr. HUMPHRIES. Ninety million cubic feet a day.

Mr. HOPPESS. Moving gas from there to Dallas, Tex.

Senator, we are keeping you away from your work. I apologize. I made a bigger speech than I meant to make.

Senator STENNIS. I think there is a lot in what you said. You learn by listening.

Mr. HOPPESS. Well, every fact we have given you is true, sir, I promise you that.

It has been good to work with you.

Senator STENNIS. It is nice to have you, both of you.

Mr. HOPPESS. Thank you for taking your time and coming by and hearing all this.

Senator STENNIS. It is a privilege. Well, come again, now, come again.

Mr. HOPPESS. We would like to give it up.

Senator STENNIS. Come on, make the trip.

Well, thanks for that good illustration you gave.

[The statement follows:]

STATEMENT OF COULTER HOPPESS, PRESIDENT, NAVASOTA RIVER IMPROVEMENT ASSOCIATION

This statement is filed on behalf of the Navasota River Improvement Association which represents a broad cross section of persons in the business, financial, farming, and oil and gas economy of Robertson, Leon, Brazos, Madison, and Grimes Counties, Tex.

The Navasota River Improvement Association is informed that the Corps of Engineers is requesting an appropriation of $295,000 to continue advanced planning and design for a structure and reservoir on the Navasota River, Brazos River, Tex. This project is commonly referred to as the Millican Dam, Brazos River, Tex. The Millican Damsite was abandoned many years ago as being completely unfeasible.

The Navasota River Improvement Association opposes the present budget request for the following reasons:

1. The three proposed locations being studied by the U.S. Corps of Engineers would flood from 35,000 to 45,000 acres of a developing, significant oil and gas field, which has now been in existence, and is expanding, for the past 4 years.

2. The value of the surface of the land during the period 1958–81 has been of such significance as to make the inundation of such land economically unfeasible.

3. We endorse the goals and determination of the present national administration and the Office of Management and Budget to reduce Federal expenditures in order to reduce and control inflation and to eventually achieve a balanced budget.

COMMENTS

The potential production of oil and gas from the area to be involved in the reservoir is now a proven fact. The damages to existing oil and gas resources, in place, and not yet produced far exceed any discernible value of impounded water. The disruption of services to more than 200 producing oil and gas wells would be disastrous. The land involved has risen from a value of approximately $100 per acre to a present day minimum value of $1,500 per acre for the surface alone. This project, in one form or another, has been studied and restudied since 1958. Economic justification of the project has been suspect during the entire period of time, and under conditions existing today further planning and studying would, in our opinion, be irresponsible.

We oppose the appropriation.

STATEMENT OF W. W. HUMPHRIES, SECRETARY-TREASURER, NAVASOTA RIVER IMPROVEMENT ASSOCIATION

I am W. W. Humphries of Route 3, Bryan, Tex. I am secretary-treasurer of the Navasota River Improvement Association. I am also a resident landowner in the area to be inundated by the proposed Millican Dam on the Navasota River. I have appeared before the committees of Congress regularly and faithfully commencing in the year 1958 and appeared each year thereafter. In all of these appearances I have attempted to fairly and fully inform this subcommittee of the existing facts surrounding the development of the Navasota River and its watershed.

In the spring of 1975, I appeared before the committees of Congress bringing information regarding the existence of lignite underlying the lands to be inundated by one of the reservoirs being studied.

In 1977 and 1978, and on April 1, 1980, I advised this subcommittee of the existence of large reserves of oil and gas in sands which lie at 9,000 to 12,000 feet throughout most of the area being considered for reservoir purposes.

Since my appearance on April 1, 1980, there have been approximately 100 successful oil and gas wells drilled and brought into production in the area.

While it is true that oil and gas can be recovered from submerged lands, it must be recognized that the cost of such development is increasing to a point that these resources might not be available when they are so badly needed. The oil being produced in the area has a high paraffin content and servicing of the wells requires the use of a work-over rig. We are advised that servicing of these wells by barge, as is generally the practice, would not be possible if these lands are flooded.

Virtually all of the land involved is under oil and gas leases, and plans for development by major oil companies, such as Gulf, Getty, and Amoco, are well-known. Wells are being drilled as rapidly as drilling rigs can be obtained.

The proposed appropriation is, in our opinion, contrary to the express purpose and effort of the Office of Management and Budget. We urge this subcommittee to give the most serious investigation to the information which we bring you today.

ADDITIONAL PREPARED STATEMENTS

Senator STENNIS. All right, this will complete the hearings now with the Members of the Congress and the public witnesses.

Senator Hatfield has stated that the official hearing record will remain open until April 10 to receive additional statements for inclusion in our hearing record.

[The statements follow:]

Statement of Dr. T. W. Fraser Russell, Director, Institute of Energy Conversion, University of Delaware

Summary

Congress recognized the importance of developing photovoltaics as a renewable source of electrical energy when it passed the Solar Photovoltaic Energy Research Development and Demonstration Act of 1978 (Public Law 95-590). As recognized by Congress the continued development of photovoltaics offers at least four general benefits to the United States.

First, various studies have concluded that by the year 2000 photovoltaic power generation could displace a significant portion of the fossil fuels used for the generation of electricity, thereby reducing the nation's dependence on imported oil.

Second, the embryonic photovoltaic industry promises to develop into a domestic, high-technology growth industry that could be a $30 billion industry (1980 dollars) by the end of the century.

Third, in addition to the foreign exchange earned by photovoltaic exports, they offer a promising avenue for improving U.S. relations with the developing countries. The provision of photovoltaic systems could provide an opportunity for the U.S. to demonstrate its concern for the aspirations of developing nations and to reinforce its global reputation for technological leadership.

Fourth, while other alternatives such as nuclear power and coal are facing strong criticism on environmental grounds, photovoltaics offer the nation an energy source that is renewable and without any significant adverse environmental consequences.

Due to the necessity for advanced research and development, a continuation of federal support is necessary to meet the long-term goals of the National Photovoltaic Plan. While the amount of private funding for photovoltaics has increased to a level of $100 million in 1980, federal funds are needed to support long term research and development and to provide a catalyst for further private investment. Federal support is especially important for university laboratories which received 31.9% of the total advanced research and development budget for photovoltaics in fiscal year 1980.

The Reagan Administration has recommended approximately a 2/3 reduction in funding for the national photovoltaic program during fiscal year 1982. If approved by Congress, this reduction would have a devastating impact upon the program and would result in either a substantial delay or a complete failure in meeting the goals established by Congress in the Solar Photovoltaic Research, Development and Demonstration Act of 1978.

In order to maintain the mandate that Congress established in the 1978 Act, it is impertive to authorize and appropriate a level of funding at or near the $161 million level proposed by the past administration. It should be noted that this already represents a $26 million reduction from the $187 million level that was first proposed by the past administration in its original submission to Congress in January of 1980.

If the Congress concludes that it is necessary to reduce the funding level for photovoltaics, it should be guided by the Administration's policy concerning the federal government's support of energy research, namely, a preference for advanced research and development over technology development and applications. This policy is stated in "A Program for Economic Recovery" as follows: "The Administration will continue direct Government support for solar programs focused on advanced research concepts and exploratory development, but assumes that the private sector will be responsible for developing marketable systems once technical feasibility is established."

In the case of photovoltaics, this policy would imply that any necessary cuts should be concentrated in the technology development and applications component of the budget as opposed to the advanced research and development component.

Specifically, it is recommended that the level of AR&D funding be maintained at about the $47 million level and that the progressive and irreversible impact of economising in fundamental research and development by born in mind should you still consider that some funding reduction is unavoidable.

My name is T. W. Fraser Russell and I am the Director of the Institute of Energy Conversion of the University of Delaware and a professor in the University's Department of Chemical Engineering. It is a pleasure to be here today to contribute to your discussion of the solar and conservation programs of the Department of Energy. Specifically, I will discuss and National Photovoltaic Program from the perspective of a university laboratory. I will first present a brief overview of the program and it accomplishments. I will then review the experience of the Institute of Energy Conversion which I think is representative of the experience of many research contractors participating in the national program. Finally, I would like to briefly comment on the level of funding for photovoltaics recommended by the Reagan Administration and by the Subcommittee on Energy Development and Applications of the House Science and Technology Committee.

The National Photovoltaic Program

The Institute's Position Paper on Photovoltaics which is attached to my statement represents a broad overview of the National Phtovoltaic Program, and I refer you to it for more detailed information. Congress recognized the importance of developing photovoltaics as a renewable source of electrical energy when it passed the Solar Photovoltaic Energy Research Development and Demonstration Act of 1978 (Public Law 95-590). This Act committed the United States to "an agressive research, development and demonstration program involving solar photovoltaic energy systems and. . .the production of electricity from photovoltaic systems cost competitive with utility-generated electricity from conventional sources." Specifically, the legislation mandated a ten-year $1.5 billion program under the management of the Department of Energy. With the passage of this Act, Congress recognized that the successful development of photovoltaics offers at least four general benefits to the United States.

First, various studies have concluded that by the year 2000 photovoltaic power generation could displace a significant portion of the fossil fuels used for the generation of electricity; estimates for the year 2000 range from about one quad to eight quads of primary energy displaced by photovoltaics. DOE has set a very conservative goal of one quad annually by the year 2000. At this level, photovoltaic systems would be saving the equivalent of approximately 1/2 million barrels of oil per day (10% of the U.S. average daily imports for 1980). In addition to these economic benefits, this reduced dependence on oil imports would ease the nation's vulnerability to political manipulation by oil-exporting countries.

Second, the presently embryonic photovoltaic industry promises to develop into a domestic, high-techology growth industry along the lines of the closely related semiconductor industry. Just as governmental support of semiconductors during their infancy has spawned today's thriving industry, the support of today's $40 million to $50 million photovoltaic business will have a significant long-term impact. Several analysts have concluded that photovoltaics could be a $30 billion industry (1980 dollars) by the end of the century.

Third, in addition to the foreign exchange earned by photovoltaic exports, they offer a promising avenue for improving U.S. relations with the developing countries. The provision of photovoltaic systems could provide an opportunity for the U.S. to demonstrate its concern for the aspirations of developing nations and to reinforce its global reputation for technological leadership and innovation.

Fourth, while other alternatives such as nuclear power and coal are facing strong criticism and opposition on environmental grounds, photovoltaics offer the nation an energy source that is renewable and without any significant adverse environmental consequences. Some of the known detrimental environmental impacts of burning conventional fossil fuels include the production of carbon dioxide and the subsequent problem of a rise in the earth's temperature due to the "greenhouse" effect; the production of nitric oxide and sulfuric oxide pollutants, which cause a severe acid rain problem; and the use of significant quantities of water. Utilizing nuclear fission to generate electricity avoids some of the environmental damage associated with fossil fuels, but produces severe thermal pollution and radioactive wastes with long lifetimes.

Photovoltaic energy-conversion systems, on the other hand, require no complex machinery or maintenance, need no water, consume no fuel, operate silently, and produce essentially no pollutants.

In response to the Solar Photovoltaic Energy Research, Development and Demonstration Act of 1978, the Department of Energy has developed a National Photovoltaic Multi-Year Program Plan. The objective of this Program is to develop photovoltaic energy systems capable of supplying a significant portion of the nation's energy needs. The Program's goal is to develop inexpensive, readily available systems that can supply safe and reliable electrical power to a wide variety of users.

Universities and industries form an important part of this program receiving most of the DOE annual budget for research, development, and purchase of photovoltaic power systems. As a result of governmental support for fundamental research, funding by industry for research, development, and production facilities is rapidly expanding.

Management of the Photovoltaic Program is decentralized. Overall management responsibility and authority resides in the Photovoltaic Energy Systems Branch at DOE Headquarters, with ancillary management responsibilities vested in two program lead centers. The Solar Energy Research Institute (SERI) in Golden, Colorado is the lead center for Advanced Research and Development (AD&D) activities.

The AR&D subprogram consists of photovoltaic technologies at advanced research levels including in research on new, thin-film materials, materials properties, cell design and device physics. Thin-film solar cells made from materials such as cadmium sulfide, cadmium telluride, zinc phosphide, gallium arsenide and amorphous silicon have potential for costs significantly less than solar cells made from single-crystal silicon.

The Institute's research on thin-film cells is supported by SERI as part of the AR&D subprogram.

The Jet Propulsion Laboratory (JPL) in Pasadena, California is the lead center for Technology Development and Applications (TD&A) activities. The TD&A subprogram concerns technologies on the verge of or already in commercial production. These technologies, whose basic photovoltaic device physics is well understood and which appear commercially promising, include all single-crystal silicon ingot and ribbon processes, and some concentrating systems using crystalline silicon cells. Such systems are currently among the most efficient, but there remains major necessary improvements in products and producting processes to reduce costs.

INSTITUTE OF ENERGY CONVERSION

The Institute of Energy Conversion was established at the University of Delaware in 1972 as an applied research institute devoted to the development of renewable energy sources and energy conservation techniques. We are known primarily for our research programs in solar electricity and thermal energy storage.

The largest individual program is directed at developing low cost, thin-film solar cells for large scale utilization. The Institute has earned a world-wide reputation as a leader in the development of this type of solar cells and has achieved the highest reported efficiency for a thin-film solar cell - a cadmium sulfide cell with a 10.2% conversion efficiency. This achievement met one of the major goals of the National plan.

The Institute now employs about 65 full-time scientists, engineers and support staff and has close ties with many faculty and graduate students at the University of Delaware. The current annual operating budget is about $2.5 million. Since its founding, the Institute has received a total of $11 million in support of our programs of which about $6 million has been in the form of federal research contracts. The remaining funds have been from the University, electrical utilities, industry and the State of Delaware. In addition to cadmium sulfide, we are also developing other thin-film cells based on zinc phosphide and amorphous silicon.

My experience while the principal investigator of the thin-film cadmium sulfide solar cell program forms the basis of the remarks I would now like to make about the impact of Administrative and Congressional decisions on the conduct of long-term research. The thrust of my comments is that at a time when decreasing energy supply is such a crucial problem for our nation, the federal government must stabilize its research program in solar energy development to allow scientists such as myself and my colleagues the opportunity to develop and implement long-term plans and to spend the bulk of our time in actual experimentation and analysis.

The Institute's program on cadmoum sulfide cells will serve as a suitable illustrative example of some of the past and current problems. The program was initiated in June, 1972, under the Research Applied to National Needs Division of the National Science Foundation. That initial award was one of a number made at that time which effectively laid the foundation for many of the present federal research efforts in solar energy applications. Since 1972 we have maintained the cadmium sulfide programs continuously and also initiated federally supported programs in the development of other materials for solar cells. We have been able to maintain the continuity in spite of major changes that have occurred in the administration of federal energy programs.

For example, there have now been four funding sources with whom we have had to negotiate and develop working relationships, the National Science Foundation, the Energy Research and Development Administration, the Department of Energy and now, the Solar Energy Research Institute.

This program has been supported continuously with federal contracts, but the contract renewals and additional increments have been for terms which have varied from as little as three months to as long as one year. During the eight years of the program, we have received a total of fifteen individual contract awards. Those familiar with the methods of contract research will appreciate that each of those fifteen awards has required a technical proposal with a detailed budget, work statements, milestone charts and so on. Generally these contracts require a significant amount ~~of~~ negotiation before they are finalized.

On many occasions, the final binding award has not been made until after the relevant start date. The continuity I referred to before has therefore necessitated a commitment of University funds which has on occasion exceeded $250,000.

Due to the concern created by the new Administration's proposal for reducing the FY 82 budget for photovoltaics from $161 million proposed by the past Administration to a level of $62.9 million, and the possibilities of recissions, the continuity of our efforts has been disrupted once again. We now have three programs with SERI and the associated contracts have all be negotiated but are awaiting final approval. We are already months into the contracts, and the University is now spending about $30,000 per week to keep the research group intact and to maintain research continuity. Nevertheless, these delays and the proposed cuts have already taken a toll on the continuity of our efforts and the morale of our staff. Other subcontractors have experienced similar setbacks in recent months.

My remarks above refer to research contracts awarded for advanced research and development. In the case of fundamental research, I am concerned about the decimation of the Universities Program. This Program was established in 1979 specifically to promote fundamental research at Universities in energy related areas and "to stimulate the growth of a solar-related intellectual base in the academic community". Two years into the program the funding level is now to be cut by almost 50% meaning the precipitous termination of half of the ongoing programs. Basic research programs and graduate studies can only prepare and serve the needs of the country if conducted in a long term stable environment.

FY 1982 AUTHORIZATION FOR PHOTOVOLTAICS

As I have indicated, the Reagan Administration has recommended approximately a 2/3 reduction in funding for the National Photovoltaic program during FY 1982. If approved by Congress, this reduction would have a devastating impact upon the program and would result in either a substantial delay or a complete failure in meeting the goals established by Congress in the Solar Photovoltaic Research, Development and Demonstration Act of 1978.

In order to maintain the mandate that Congress established in the 1978 Act, it is imperative to authorize and appropriate a level of funding at or near the $161 million level proposed by the past administration. It should be noted that this already represents a $27 million reduction from the $187 million level that was first proposed by the past administration in its original submission to Congress in January of 1980.

If the Congress concludes that it is necessary to reduce the funding level for photovoltaics, I believe that it should be guided by the Administration's policy concerning the federal government's support of energy research, namely, a preference for advanced research and development over technology development and applications. This policy is stated in "A Program for Economic Recovery" as follows: "The Administration will continue direct Government support for solar programs focused on advanced research concepts and exploratory development, but assumes that the private sector will be responsible for developing marketable systems once technical feasibility is established."

In the case of photovoltaics, this policy would imply that any necessary cuts should be concentrated in the TD&A component of the budget as opposed to the AR&D component.

Unfortunately, the Subcommittee on Energy Development and Applications of the House Science and Technology Committee has done practically the opposite. Specifically, it has proposed a budget authorization of $105.15 million which calls for a $25 million reduction in the AR&D budget but a substantial increase in the TD&A component.

While the latter component of the program produces more immediate and tangible benefits, it is basically advanced research and development which will be necessary to produce the cost-effective cells of the future. Although there is currently only one type of efficient-cell commercially available namely crystalline silicon, these cells are too expensive except for locations not served by the electrical grid. Despite the projected cost reductions in this type of cell, there is substantial agreement that this technology will never be able to meet the long-term DOE price goal of $.15 to $.50 peak Watt. It is only at these prices that displacement of conventional generation systems can occur. DOE and SERI and many commercial groups have projected that only a thin-film technology (e.g., cadmium sulfide, amorphous silicon) can provide both the necessary efficiency and cost.

A decision to significantly reduce the AR&D component of the photovoltiac budget will result in either a substantial delay or a complete failure to meet the long-term cost goals. Given the intensive effort that the Japanese and others are devoting to advanced research on materials such as amorphous silicon, the end result of the reduction in AR&D funding could well be the loss of a U.S. technological lead in an important industry. It would be regrettable for the U.S., which currently controls over three quarters of the international market in photovoltaics, to be forced to import Sanyo amorphous silicon cells during the 1990's.

Another factor to consider is the long-term impact of reductions in AR&D funding upon the caliber of basic photovoltaic research in the U.S. In FY 1981, university-based laboratories received 31.9% of the AR&D budget. In contrast to industrial organizations receiving support for technology development and commercialization, these University laboratories cannot simply substitute private capital for government support. As a result, a substantial reduction in AR&D funding would lead to the termination of many of these programs. The loss would be manifest in both fundamental knowledge and trained scientists and engineers and the consequence for the future of the photovoltaic program in the U.S. could be disastrous.

The final point I wish to make concerns the catalytic effect of government spending in advanced research and development. The influx of private investment in photovoltaics that followed the passage of the Solar Photovoltaic Research, Development and Demonstration Act of 1978, reveals the strong correlation between government and private support. The total federal investment in the cadmium sulfide cell is probably between $10 and $15 million dollars. However, directly as a result of the research this supported two new manufacturing firms have been created with a total commitment of over $40 million dollars. Other commercial organizations are also now committing major funds to research on this cell. Any significant reduction in funding could prevent or delay similar private investment in the other photovoltaic systems still in the basic stage of research.

In order to maintain the commitment that Congress made to photovoltaics research and development in 1978, I strongly recommend that your Subcommittee reconsider that $22 million level of AR&D funding authorized by your colleagues.

Specifically, I recommend that the level of AR&D funding be maintained at about the present level of $47 million and that the progressive and irreversible impact of economising in fundamental research and development be born in mind should you still consider that some funding reduction is unavoidable.

POSITION PAPER ON PHOTOVOLTAICS

Institute of Energy Conversion
University of Delaware

INTRODUCTION

In the Solar Photovoltaic Energy Research, Development and Demonstration Act of 1978 (Public Law 95-590), Congress committed the United States to "an aggressive research, development and demonstration program involving solar photovoltaic energy systems and . . . the production of electricity from photovoltaic systems cost competitive with utility-generated electricity from conventional sources." Specifically, the legislation mandated a ten-year $1.5 billion program under the management of the Department of Energy. Congress recognized the importance of developing photovoltaics as an essential non-polluting and renewable source of electrical energy.

The continued development of photovoltaics offers at least four general benefits to the United States. First, various studies have concluded that by the year 2000 photovoltaic power generation could displace a significant portion of the fossil fuels used for the generation of electricity; estimates for the year 2000 range from about one quad to eight quads of primary energy displaced by photovoltaics. The broad range of estimates reflects different assumptions regarding program funding and the costs of both photovoltaics systems and competing systems.

DOE has set a very conservative goal of one quad annually by the year 2000. At this level, photovoltaic systems would be saving the equivalent of approximately 1/2 million barrels of oil per day (10% of the U. S. average daily imports for 1980).

In addition to these economic benefits, this reduced dependence on oil imports would ease the nation's vulnerability to political manipulation by oil-exporting countries.

Secondly, the embryonic photovoltaic industry promises to develop into a domestic, high-technology growth industry along the lines of the closely related semiconductor industry. Just as governmental support of semiconductors during their infancy has spawned today's thriving industry, the support of today's $40 million to $50 million photovoltaic business will have a significant long-term impact. Several analysts have concluded that photovoltaics could be a $30 billion industry (1980 dollars) by the end of the century. This development will create thousands of new jobs, productive investment opportunities, and the prospect of substantial exports. At present, the U. S. industry supplies approximately 78% of the world market - a market which is expected to grow dramatically during the next several years. Photovoltaics are particularly well-suited to the needs of developing countries and are becoming economically attractive for use there.

Thirdly, in addition to the foreign exchange earned by photovoltaic exports, they offer a promising avenue for improving U. S. relations with the developing countries. The provision of photovoltaic systems would provide an opportunity for the U. S. to demonstrate its concern for the aspirations of developing nations and to reinforce its gobal reputation for technological leadership and innovation.

Fourthly, while other alternatives such as nuclear power and coal are facing strong resistance on environmental grounds, photovoltaics offer the nation an energy source that is renewable and without any significant adverse environmental consequences. Some of the known detrimental environmental impacts of burning conventional fossil fuels include the production of carbon dioxide and the subsequent problem of a rise in the earth's temperature due to the "greenhouse" effect; the production of nitric oxide and sulfuric oxide pollutants, which causes a severe acid rain problem; and the use of significant quantities of water. Utilizing nuclear fission to generate electricity avoids some of the environmental damage associated with fossil fuels, but produces severe thermal pollution and radioactive wastes with long lifetimes.

Photovoltaic energy-generation systems, on the other hand, require no complex machinery or maintenance, need no water, consume no fuel, operate silently, and produce essentially no pollutants.

PHOTOVOLTAIC TECHNOLOGY

Photovoltaic energy-generation systems provide a clean, simple method for direct conversion of sunlight to electrical energy. Because they are solid state and intrinsically modular and because they require no complex machinery or maintenance, photovoltaic systems are adaptable and cost-effective in large as well as small-scale applications.

The Photovoltaic Phenomenon - Photovoltaic devices convert light directly into electricity. When light energy, or photons, strike semiconductors, internal voltages are created. Light meters used in photography employ this principle to measure the intensity of light by having the electricity move a needle across a scale. The basic scientific principles are well known, and the technology for specialized uses is relatively advanced. For instance, photovoltaic devices, called solar cells, are used extensively in providing power for space satellites and have had no recorded failures in space.

Photovoltaic systems produce direct current (DC) electricity which, if desired, is readily convertible into alternating current (AC) electricity by power conditioners. In addition, various overall system power output levels can be achieved by connecting arrays (i. e., integrated assemblies of modules) in series or parallel.

Photovoltaic systems may be used to generate power in large central stations for sale to customers, or in decentralized systems in which the consumers produce the power themselves. In many decentralized applications the electricity can be used immediately for DC loads. Alternatively, the power can be converted to conventional AC in either centralized or decentralized generation facilities, or stored for subsequent AC or DC load use. Interactive systems are now under study in which the consumers purchase power when needed from the utility and sell back power during excess production.

Technology Development and Advanced Research - The diverse, technically sophisticated photovoltaic technologies for electricity production can be conveniently divided into two broad categories. One category consists of technologies already in commercial production. These technologies, whose basic photovoltaic device physics is well understood and which appear commercially promising, include all single-crystal silicon ingot and ribbon processes, and some concentrating systems using crystalline silicon cells. Such systems are currently among the most efficient, but improvements in the products and their production processes are needed to reduce costs.

The second category consists of photovoltaic technologies at advanced research levels. Included is research on new, thin-film materials, materials properties, cell design and device physics. Thin-film solar cells made from materials such as cadmium sulfide, cadmium telluride, zinc phosphide, gallium arsenide and amorphous silicon may have potential for cost significantly less than solar cells made from single-crystal silicon. As technologies show promise in the Department of Energy's Advanced Research Program, they are advanced into the Technology Development and Applications Program for development of commercial-scale production equipment and processes. Technologies currently under consideration for this transfer include polycrystalline silicon and cadmium sulfide.

NATIONAL PHOTOVOLTAICS PROGRAM

In response to the Solar Photovoltaic Energy Research, Development and Demonstration Act of 1978, the Department of Energy has developed a National Photovoltaics Multi-Year Program Plan. The objective of the Photovoltaics Program is to develop photovoltaic energy systems capable of supplying a significant portion of the nation's energy needs. The Program's goal is to develop inexpensive, readily available systems that can supply safe and reliable electrical power to a wide variety of users.

The DOE Program begins with basic research and identifies promising solar cell concepts. Successful concepts are transferred from advanced research to technology development and application projects for implementation. The requirements for each technology are determined from market analyses. Evaluation and narrowing of candidate ideas continues periodically throughout the development process, until products or systems are ready to be introduced into the marketplace at a competitive price.

Universities and industries form an important part of this program, receiving most of the $160 million DOE annual budget for research, development, and purchase of photovoltaic power systems. As a result of the governmental support for fundamental research, funding by industry for research, development, and production facilities is rapidly expanding.

Photovoltaic remote applications have been practical and cost effective for more than five years. As the costs of photovoltaic power generation decreases, the diversity and size of the installations increase. With the continued excellent progress of the National Photovoltaic Program, photovoltaic systems are expected to become a source of low-cost electricity capable of competing in future large energy markets.

PROGRAM GOALS FOR SYSTEM PRICES AND MARKETS

To give substance and focus to its objective, the Program has established commercial readiness goals which indicate the time and price at which photovoltaic systems are expected to be offered commercially.

Photovoltaic commercial readiness, or system price, goals have been established in each of four major applications: remote/international, residential, intermediate size institutional/commercial, and utility. These are presented in Table 1.

TABLE 1. Photovoltaic Program Price Goals (1980 Dollars)*

TIME	MODULE PRICE (FOB)	SYSTEM PRICES	PRIME APPLICATIONS
1982	$2.80/Wp	$6 - 13/Watt	Remote/International
1986	$0.70/Wp	$1.60-2.60/Watt	Residence & Intermediate Size Load Centers
1990-2000	$0.15-0.40/Wp	$1.10-1.30/Watt	Utilities

*(The power output of Photovoltaic arrays is measured in terms of maximum wattage produced at high noon on a clear day, designated "Peak Watts" (Wp). All prices are in 1980 dollars. Module prices are FOB factory dock only, and specifically do not include costs of marketing and distribution.)

The price of photovoltaic modules has decreased significantly from $30/Wp in 1976 to as low as $6/Wp in 1980. Installed system costs have dropped from $60/Wp in 1976 to $15/Wp in 1980.

Overseas markets, especially in developing countries which suffer from rising oil prices, are expected to absorb a large share of the market in the near term, filling a "market gap" between remote uses and grid-connected applications for photovoltaic systems in the United States. An International Photovoltaic Plan submitted to Congress early in FY 1980 describes this market and outlines an approach that will help Third World countries with their energy needs. If pursued, this plan could prove beneficial to U. S. relations with developing nations.

As the 1986 price goals are approached, photovoltaic systems with reasonable lifetime and performance characteristics will begin to augment centrally generated electricity in residential applications throughout most of the country. Intermediate application (commercial, industrial) should follow a similar development pattern. Utilities are also expected to augment their generating capacity with photovoltaic systems. Two southern California utilities, for example, are currently planning to build plants of 100 and 510 megawatts.

Program Management - Management of the Photovoltaic Program is decentralized. Overall management responsibility and authority resides in the Photovoltaic Energy Systems Branch at DOE Headquarters, with ancillary management responsibilities vested in two program lead centers. The Solar Energy Research Institute (SERI) in Golden, Colorado is the lead center for Advanced Research and Development (AR&D) activities; the Jet Propulsion Laboratory (JPL) in Pasadena, California is the lead center for Technology Development and Applications (TD&A) activities.

This strategy relies on industry to provide the innovations, to develop the necessary technology, and to develop the commercial products that will meet the goals of the Program. The role of the Program is to provide support and assistance throughout this process of commercialization. Commercialization must be a private-sector process. It is, however, a fundamental assumption of the Program strategy that the government can, through suitable program activities, cause the process to take place at an accelerated rate.

Today, the Federal R&D effort supports an emerging industry base for the technology. It encourages private investments in device and systems R&D. It transfers federally financed know-how into the private sector to create a new industry which is now growing rapidly.

THE PHOTOVOLTAIC INDUSTRY

Over 30 companies are now in business. The commitments of these companies range from production and sale of photovoltaic modules, to internal funding of research and development, to participation in federally funded R&D. Companies with a wide variety of backgrounds have made some level of commitment to photovoltaics. The producing companies include three independent new companies, two energy company subsidiaries, two manufacturers of photovoltaic cells for space use, and one major electrical equipment and semiconductor firm. Companies whose commitments are presently limited to R&D include several semiconductor and electronics companies, hardware research-based companies, energy company subsidiaries, major materials suppliers, and new photovoltaic companies.

The terrestrial photovoltaic industry is very new (less than five years old) and presently small (approximately $20 million in total sales in 1979). Nevertheless, there are 14-15 U. S. firms currently producing flat-plate silicon modules. U. S. firms compete with those of Europe (especially France) and firms in Japan. Price competition and competition for markets appear intense. Many firms are currently sustaining losses in hope of eventual success. Several new photovoltaic ventures have recently entered or are preparing to enter the industry. Three new technologies are on the verge of commercial production. Due to the embryonic nature of the industry, there is a heavy reliance upon the federal government for funding of both research and applications. The establishment of a 10-year, $1.5 billion commitment to photovoltaics by the Research and Development Act of 1978 has been a major stimulus to the level of private investment and the overall development of the industry. Any significant change in this commitment could disrupt the industry's momentum and, in the worst case, could cause the failure of some of the firms, especially smaller, independent producers.

At present, the U. S. photovoltaic industry dominates the world market. accounting for approximately 78% of all photovoltaic exports. A reversal of photovoltaic policy and funding would impair the ability of U. S. firms to maintain this lead over Japanese and European firms. In the case of both the Japanese and the French, their growing efforts are linked closely with governmental funding and promotion of both testing and application experiments in various developing countries. Several studies have indicated that foreign competition could be capable of displacing the U. S. lead in photovoltaics if a strong governmental commitment to the U. S. National Photovoltaics Program is not continued. At a time when several U. S. industries are being outpaced by foreign competition it would be unfortunate for American business, foreign policy and energy consumers to lose this commanding lead in such a potentially significant industry.

Statement of the Institute of Electrical and Electronics Engineers, Inc.

I am writing to you today on behalf of the Committee on Research and Development of the Institute of Electrical and Electronics Engineers (IEEE). The Institute, founded in 1884, is the world's largest technical professional engineering society, with a membership of 165,000 in the United States and a total of more than 210,000 worldwide. Our members are volunteers with expertise in the engineering aspects of power, energy, communications, transportation, biomedicine and computers, as well as numerous related fields. I am a Fellow of the Institute and the Past President of the Nuclear and Plasma Sciences Society of the IEEE. As Chairman of the Subcommittee on Energy of the IEEE's Committee on Research and Development, it is my pleasure to have the oppourtunity to submit a brief statement on behalf of this committee before the Energy and Water Development Subcommittee of the House Appropriations Committee.

In our energy future, electrical energy is destined to play an increasingly important role and will be critical to the achievement of energy independence. It meets many human needs, as I am sure you all realize. How do we obtain electrical energy? Basically, we depend upon conversion processes from other forms of energy for almost all of our electricity. We then must send it to where it is needed through a complex and interconnected set of distribution networks. We believe that effective Federal involvement in research in this area requires a substantial investment in new knowledge and technology development. We do appreciate the necessity for the spending containment goals as well as the problems that you must encounter in considering the income side of the budget, such as tax cuts or tax incentives which could promote industrial development. These are really two sides of the same coin, since in the last analysis it is the taxpayers' money that must be used.

We strongly agree with the philosophy expressed in the Reagan budget for the Department of Energy, namely that DOE should support those items that are long term, high risk and with high potential payoff. By high risk we mean in an economic, not a safety sense, and by high payoff we mean those projects that offer a substantial advantage in economics, safety and environmental factors.

The IEEE R&D Committee was pleased to learn of increases or only moderate cuts in the submission of the DOE program to the House Budget Committee by the House Science and Technology Committee. In particular, we note that the Committee recommended a higher authorization level for electrical energy systems and for energy storage systems. We are also happy to see that the House Science and Technology Committee also increased the Reagan request for magnetic fusion from $460 million to $475 million. We support these recommendations.

Because of time limitations and the amount of technical information at our command, the IEEE R&D Committee has decided that the interests of all concerned would best be served by a discussion of several specific budget issues and projects. We plan to focus our comments on seven areas. They are: magnetic fusion, nuclear fission, solar, electric systems, energy storage, basic energy sciences, and conservation. I shall discuss them in this order.

The Magnetic Fusion Energy Engineering Act of 1980 was a very significant policy statement which set forth the objective of demonstrating the viability of fusion as an energy source, perhaps as early as the mid-1990's. We have enthusiastically welcomed the passage of this act, and we believe that the spirit of this act should be reflected in the present Department of Energy budget. We believe that fusion represents a program that is entirely consistent with the philosophy of the Reagan DOE budget -- it is high risk, long term and high payoff.

As a natural consequence of the successes in this field, the size and cost of fusion experiments are increasing. The numbers of trained personnel required to staff them can only be supplied by the training of students in the use of modern fusion facilities in our nation's colleges and universities. This manpower development must be achieved in meaningful ways, which requires a substantial and broad, long-range commitment to ongoing programs at these institutions.

We strongly support the continued pursuit of the main-line fusion concepts such as TFTR, MFTF-B and the Elmo Bumpy Torus. We also support the formation and development of the Center for Fusion Engineering. However, as mandated by the 1980 Fusion Act, we believe that it is imperative that various alternate concepts be appropriately developed, as their potential becomes known, through a broadly based program, in order to have an impact on the progress toward the goal of this Act.

As an example, I draw your attention to the torsatron/stellarator concept. Recent research efforts in the Soviet Union, the United Kingdom, West Germany and Japan have shown dramatic physics results. Ongoing studies of the viability of the concept as a reactor at the Los Alamos National Laboratory and at the University of Wisconsin have shown that this concept is most attractive from many viewpoints, including steady-state operation, low recirculating power and energy storage, and fully ignited operation. Torsatron/stellarators have achieved physics parameters that match those of equivalently sized tokamaks. Thus, it is appropriate to advance this concept. At least one proposed device has been favorably reviewed and is now ready for an in-depth design and cost analysis.

As you may note, I am personally interested in this concept. However, I would like to point out that in February of this year, a group of ten distinguished scientists and engineers sent a letter to Edwin Kinter, the Associate Director for Fusion Energy of the Office of Energy Research of the Department of Energy, suggesting that the "concept has now progressed to the point where it should become a key and significant part of the U. S. fusion program, both because of its intrinsic promise and because it will broaden and strengthen the U. S. toroidal confinement program." A copy of this letter, along with recent articles from the New York Times and Physics Today are included with this statement as suplementary material.

In summary, then, the IEEE R&D Committee supports the recommendation of the Subcommittee on Energy Research and Production to increase the magnetic fusion budget to $475 million.

I now turn to nuclear fission. The IEEE R&D Committee supports the plans to develop the breeder reactor program. It is important to do so in order to acquire engineering as well as manufacturing experience and plant component performance data needed to develop a U. S. liquid metal fast breeder reactor (LMFBR). We do not yet endorse a commitment to full-scale commercial development of the LMFBR fuel cycle prior to resolving the issues of reprocessing, waste management, safety and security. We support the exploration of alternative fuel cycles or strategies which may offer certain advantages over the LMFBR.

In the area of solar energy, the IEEE R&D Committee is concerned about the severity of cuts in programs in this area. While we recognize that some solar technoloies may be near demonstration and/or commercialization and that industry may be prepared to move these technologies, there are other solar technologies for which this is not the case. As a consequence, attention should be given to restoring some of the severe cuts, as has been recommended by the House Subcommittee on Energy Development and Applications. In particular, I would like to draw your attention to two areas.

First, photo-voltaic device and system development is very likely to represent long-term and high-risk commitments. In particular, materials development and systems integration are not sufficiently understood. Second, thermal processes which are especially applicable to hot water heating, air conditioning and space heating for both residential and commercial buildings, offer the potential for substantial impact on energy supply and conservation of non-renewable sources. There is a strong need for the development of designs for collectors, covers and storage as well as for integrated architectural and engineering designs of passive and hybrid solar systems. If DOE could support the base of the technology, it will be possible for both solar system manufacturers and the building industry to develop more rational and cost effective designs.

In the area of electric energy systems, the IEEE R&D Committee wishes to again support the increase in funding proposed by the House Energy Research and Production Subcommittee. We favor this for the following reasons. First, this is the only part of the Department of Energy that is concerned with the delivery of electrical energy once it is generated. The Department of Energy is in a unique position to apply a system analysis approach to maximize the efficiency of all of the components making up the system. Second, DOE has for many years, been the only source of funding for such system studies. Third these programs are providing a core of technically qualified manpower who are important to the future of utilities, vendors, etc. University programs prior to the establishment of this project were severely lacking.

Electric energy must be generated economically, reliably, safely and in an environmentally acceptable way. And, it must also be transmitted so that it meets all of these same four criteria. Presently, electric power systems in the U. S. deliver alternating current (ac) power at voltages up to 765,000 volts. The efficiencies of high voltage ac transmission are well known. Industry is now considering high voltage transmission systems at 1,200,000 volts. The commerical use of such transmission is projected beyond 1990. Today there is renewed interest in using direct current (dc)in such systems, and in fact, 21 such systems are operational worldwide, with four of them being in the United States. High voltage dc (HVDC) is an important adjunct to ac power transmission and has several advantages: economics for long-distance overhead or intermediate-distance cable systems, asynchronous connections, which are important when considering the exportation or importation of energy from Canada and Mexico, power controllability, low short-circuit currents, and reliability.

The solutions to the problems do not simply derive from extrapolation of today's technology but require R&D in areas where solutions may generate new problems. For example, a 1,200,000 volt line may carry the entire output from one power generating plant. What happens to the power system if the line fails, even momentarily? Is a 1,200,000 volt line safe for persons exposed to the electric and magnetic fields it creates? Thus, since much of the electric energy system research program is long term, high risk and high payoff, we believe that the $25 million recommended by the House Subcommittee on Energy Research and Production is justified.

In the energy storage area, DOE support has focused on mechanical, magnetic and underground energy storage. We endorse the support of those concepts and processes which require longer-term, high-risk and high-payoff technologies in energy storage. Superconducting magnetic energy storage is an example of such a concept which offers high efficiency (electric utility ac is converted to dc and stored with 95 percent efficiency), is applicable to both daily and weekly storage, provides quick response to load changes and offers a favorable environmental impact. Conceptual designs have now been established, and there is a stong need to move the concept through a component research and development and engineering design phase to establish the economic basis for decision making on future prototypes and demonstration phases. It is uged that adequate and sustained funding be provided to insure the timely development of all of the more promising storage concepts under consideration.

I turn to the area of basic energy sciences. This work provided an important foundation for the more applied programs throughout the Department of Energy and has been responsible for many important discoveries as related to energy matters through the years. It is always tempting to defer and delay this particular aspect of the Department's programs, but such an action could result in very serious deficiencies in our knowledge base further in the future. It is encouraging to note that the Reagan budget modification for the Department of Energy reflects continuing strong support for basic energy science efforts, a position that we in IEEE stongly support.

Finally, I discuss the subject of conservation. The IEEE urges careful consideration of those aspects of the conservation program which may not in themselves be implemented as a result of increased energy costs. In particular, cogeneration, application of modern technologies for improved control and utilization of energy, and increased efficiency of transportation are of this type. It may be hazardous to assume that these areas may achieve maximum energy efficiency simply on the basis of market trends. In fact, they and other related areas may not develop fast enough to recover their position in the economy before rising energy costs cause major dislocations of these efforts, so necessary to the economic well-being of our country.

In closing, first, if there is any additional information that you may require concerning this statement, I would be glad to provide it to you. Finally, I would like to tell you that I appreciate the difficulty of the process you are going through. I have confidence in your judgment. Thank you very much.

SUPPLEMENTARY MATERIAL ATTACHED

1. **Letter from ten scientists and engineers, dated February 24, 1981, to Edwin E. Kintner, Associate Director for Fusion Energy of the Office of Energy Research, regarding the need for an aggressive U. S. program in the area of torsatron/stellarators.**

2. **Article by Walter Sullivan from the New York Times of June 1, 1980, describing the dramatic results achieved by the West German stellarator in which they are described as the "most important development in fusion energy in more than a decade."**

3. **Article from Physics Today, August 1980 issue, describing the same results with a general survey of the work done with this concept.**

Letter From James D. Callen, Professor of Nuclear Engineering and Physics, University of Wisconsin

February 24, 1981

Dr. E. E. Kintner, Director
Office of Fusion Energy
Department of Energy
Washington, D.C. 20545

Dear Ed:

Enclosed you will find the final, formal copy of a statement by the Stellarator Advisory Committee* on the "Immediate Need for an Aggressive U.S. Stellarator Program." This version contains minor corrections from the draft I sent you on January 19. Thus, you should replace the previous draft with this one.

The Stellarator Advisory Committee looks forward to the development of an aggressive U.S. program in stellarators, which have recently made tremendous progress and become a leading, alternate concept. The Committee would welcome further discussion with you and your staff on this increasingly important component of the U.S fusion program.

Sincerely,

Jim Callen

James D. Callen
Professor of Nuclear Engineering
and Physics

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* Stellarator Advisory Committee:
J. D. Callen, University of Wisconsin
T. Jensen, General Atomic
J. L. Johnson, Princeton Plasma Physics Laboratory
R. A. Krakowski, Los Alamos Scientific Laboratory
G. L. Kulcinski, University of Wisconsin
P. A. Politzer, Massachusetts Institute of Technology
M. N. Rosenbluth, Institute for Fusion Studies (Texas)
J. L. Shohet, University of Wisconsin
H. Weitzner, Courant Institute (NYU)
S. Yoshikawa, Princeton Plasma Physics Laboratory

Immediate Need For An Aggressive U.S. Stellarator* Program

The worldwide stellarator program has made tremendous progress in the last couple of years. The stellarator concept has now progressed to the point where it should become a key and significant part of the U.S. fusion program, both because of its intrinsic promise and because it will broaden and strengthen the U.S. toroidal confinement program. In particular, the Stellarator Advisory Committee feels that it is important to establish, expeditiously, a vigorous, broad-based U.S. stellarator research program that can noticeably impact the field in the near future and evolve to a leadership position in it over the next decade. The Committee feels that a key element in this expanded program is that one or more innovative, significant stellarator experiments be constructed in the U.S. as soon as practicable, with appropriate design studies being initiated immediately. This brief summary of the Stellarator Advisory Committee's views and recommendations is amplified upon in the succeeding paragraphs.

Notable progress in the stellarator program has been made recently in:

1) Experimental parameters -- the W-VIIA experiment at Garching has achieved $n\tau_E > 10^{12}$ sec-cm^{-3}, $T_i > 0.7$ keV (a level second only to that of tokamaks in nearness to fusion feasibility requirements) in a current- and disruption-free plasma powered by 635 kW of neutral beam injection.
2) Modular/simplified coil designs --- much better computational tools for analyzing stellarator configurations have been developed; both modestly deformed toroidal field coils and multiple coil groups with internal windbacks have been shown to give stellarator configurations with no toroidally continuous windings.
3) Particle orbits and transport -- drift orbits of energetic particles are found numerically to be better contained than simple analytic predictions; the results of new Monte Carlo type computer simulations of neoclassical transport scaling to reactor conditions seem more optimistic than predictions of analytic theory and are forcing a re-examination of it; at modestly large aspect ratio, drift orbits can be well contained and neoclassical transport made comparable to that in an equivalent tokamak.
4) Maximum stable β -- three-dimensional numerical calculations by the NYU group have indicated that the large Japanese Heliotron-E experiment, whose configuration was not designed for optimum β, has for low mode numbers a maximum stable average β in excess of 5%.
5) Optimization -- inventive work has been initiated by the theory group at Garching aimed at reducing the toroidicity-induced secondary current, thereby increasing the equilibrium β and reducing the neoclassical transport; optimization for one or several specific purposes is feasible even within a single stellarator experiment because different equilibria can be

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[*] The word stellarator is used here to describe all toroidal plasma confinement devices of the stellarator or torsatron type in which there is little or no externally driven current in the plasma.

produced through external control of the harmonic content of the magnetic surfaces, the rotational transform profile, and plasma position.

A synthesis of recent results from major stellarator experiments throughout the world -- W-VIIA at Garching, CLEO at Culham, L-2 at Lebedev, Heliotron-E at Kyoto and JIPPT-II at Nagoya -- indicates that:

1) Stellarators can operate disruption-free (and apparently free from MHD fluctuations of all types) for $ɨ^* > 0.14$ (with ohmic heating) and $ɨ > 0.5$ (with neutral beam heating).
2) Essentially current-free operation (i.e., a true stellarator configuration) is possible with auxiliary heating either by neutral beams (W-VIIA) or electron cyclotron heating (CLEO).
3) The energy confinement in current-free operation is at least as good as in discharges with ohmic heating, and may be several times better. With ohmic heating the energy confinement is about the same as in a comparable tokamak.

4) The β achieved in W-VIIA ($\beta_{max} \sim 1\%$) is in the range of the theoretical limit (0.5-1% -- so low because of the lack of shear and high aspect ratio) for the onset of ballooning modes in this device and no deleterious effects are observed.

Taken together, these results support the viability of the stellarator concept for current- and disruption-free (and hence presumably steady-state) operation with good stability and confinement properties.

Some of the potential advantages of a stellarator configuration as a fusion reactor concept, which are currently being investigated in reactor design studies, are:

1) Steady-state magnetic field system that does not require separate control windings or pulsed fields.
2) Segmented, truly modular construction.
3) Current- and disruption-free plasma operation.
4) Startup on vacuum flux surfaces, which should reduce plasma-wall interactions during startup.
5) Divertors built in as a natural consequence of the magnetic configuration.
6) Possibility for high Q, or ignited, moderate power systems if β is sufficiently high (> 5%).

During the coming year further progress in the stellarator program is anticipated in:

1) Experiments -- the W-VIIA device (small rotational transform, nearly vanishing shear, weak magnetic well) at Garching is continually being

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[*] $ɨ \equiv \iota/2\pi = 1/q$ is the rotational transform of the magnetic field (q is the safety factor of tokamak literature).

better diagnosed and utilized for new stellarator experiments (higher density operation, pellet injection, doubled neutral beam power, etc.); the Heliotron-E experiment (high rotational transform and shear, no magnetic well) at Kyoto has begun operation and will commence high power neutral beam heating experiments this year; the Kyoto group has also begun construction of Heliotron R, a device exclusively devoted to RF heating.

2) Theory -- stellarator equilibrium, stability, transport, and heating studies utilizing both analytic and computational methods are receiving increased attention in the U.S., Germany, Japan, and the U.S.S.R.

3) Reactor concepts -- stellarator reactor studies are currently underway in the U.S. at LASL/PPPL and the University of Wisconsin. A reactor study based on the heliotron concept has been initiated at Kyushu University in Japan, in cooperation with the group at Kyoto.

4) Stellarator concepts elucidation -- A joint U.S.-EURATOM "Report on Stellarators" is being prepared.

During the past decade the stellarator program has benefited substantially in some critical areas from the larger and more advanced tokamak program, because a stellarator that is heated primarily by a current in the plasma is similar to a tokamak. However, in stellarators as joule heating is replaced by more powerful auxiliary heating, the stellarator concept becomes quite distinct from that of the tokamak. Thus, it is not possible to advance further our understanding of stellarator physics by simple extrapolation from tokamak experiments. Rather, current-free stellarator experiments with strong auxiliary heating will be required. Nonetheless, given the similarities in a number of toroidal confinement, stability and heating issues, and the fact that investigations of fully three-dimensional stellarator configurations help elucidate the underlying physics of "two-dimensional" tokamaks, a vigorous U.S. stellarator research program will broaden and strengthen the overall toroidal confinement program and may significantly accelerate development of the mainline tokamak program. An example of this latter point is the finding that disruptions can be controlled in ohmically heated stellarators by the addition of a weak rotational transform -- $\iota > 0.14$, although W-VIIA results indicate $\iota > 0.5$ may be required when there is strong auxiliary heating. Thus, the stellarator program has experimentally demonstrated one possible means for ameliorating a key tokamak concern -- disruption control. The tokamak program may well want to exploit this encouraging development by adding some stellarator windings to a tokamak for disruption control.

The present direction and limited pace of the U.S. stellarator program was set after the "Proof-of-Principle Alternate Concept Review" in October, 1978 (cf., DOE/ET-0085, March, 1979). At that time operational stellarator experiments were all ohmically heated and not obviously different from comparable tokamaks. Significant questions were raised in the review concerning neoclassical transport, β limits and engineering feasibility. Some small programs were initiated in the U.S. to address these issues and, as indicated above, considerable progress has been made toward their positive resolution. In view of these developments, the recent experimental successes, and the potential reactor advantages, stellarators are emerging as a key alternate concept, perhaps second only to the mainline tokamaks. Thus, the Stellarator Advisory Committee feels that the U.S. should develop, expeditiously, a much more aggressive stellarator program.

There are several reasons why the U.S. needs to upgrade its stellarator program now:

1) Stellarators have recently achieved what seem to be the best plasma parameters ($n\tau_E > 10^{12}$, $T_i > 0.7$ keV) of any alternate concept and their attractiveness as a reactor candidate has continually improved. Since stellarators seem capable of steady-state, disruption-free operation with built-in divertors and moderate aspect ratio, they may provide solutions to some of the key concerns of tokamaks and thus may be the ultimate natural evolution of the tokamak concept. Scientifically, the U.S. should have a much more vigorous program in this "machine of the future," leading alternate concept area.
2) The U.S., as the leading fusion program in the world, has unique and extensive scientific expertise and technology that it can bring to bear to advance the worldwide stellarator program at a much more rapid pace. Also, as the world fusion leader and originator of the concept, the U.S. has a special responsibility because other countries look to it for guidance on the future of stellarators. This leadership role will be questioned if other countries percieve the U.S. as not seriously supporting what we urge them to do.

3) The addition of a vigorous stellarator research effort will help provide the U.S. fusion research program and in particular the toroidal confinement area with a breadth it is perceived as needing presently. The benefits of a broader research program are not just as insurance against future difficulties with the front runner, but also that of the likelihood that a broader program may significantly accelerate the development of the front runner, as discussed above.
4) Further delays in upgrading the U.S. stellarator research program make it increasingly difficult and costly to participate significantly in this promising and rapidly developing field. Recent advances have already established the scientific viability of the stellarator concept and further delay can only reduce the cost effectiveness of the overall U.S. fusion program.

It is not the purpose of this document to spell out a detailed U.S. stellarator program. However, it is considered essential that a commitment be made to undertake an aggressive program that will be able to contribute significantly to the field in the near future and evolve to a leadership position in it over the next decade. The aggressive stellarator program which the Stellarator Advisory Committee feels necessary has the following key elements:

1) Vigorous, broad-based theory program -- the present diverse, small theoretical and conceptual efforts should be strengthened and expanded. Key areas to be strengthened include: MHD equilibrium and stability, drift orbits, neoclassical transport, and magnetic field configurations. Some of the areas that need to be added include: transport simulation, resistive MHD, and non-ohmic heating.
2) Expanded reactor studies -- the initial reactor studies should be continued and expanded.
3) Significant experimental program -- at present the only stellarator experiments in the U.S. are the small (a ~ 5 cm) PROTO-CLEO stellarator and torsatron devices at the University of Wisconsin. There are a number of configurational and operational options in stellarator designs (W-VIIA and Heliotron-E represent two limiting cases in shear strength), which should be tested on some modest scale devices that are at least large enough to not be dominated by atomic physics effects. In view of the worldwide stellarator program, these experiments should be large enough (up to PLT in size) and flexible enough to explore a range of high-temperature, current-free stellarator parameters. They should test energetic particle confinement, transport scaling, beta limits and modes of operation, thereby elucidating the appropriateness of various configurations. Design studies should be initiated immediately to flesh out the various options and develop reliable cost estimates so that innovative, significant U.S. stellarator experiments can be commissioned as soon as funds become available. It is important to realize that an aggressive U.S. stellarator program must include one or more significant U.S. stellarator experiments. Otherwise, key U.S. scientists will be unwilling to work in the program, we will not be intimately knowledgeable in this area, and other countries will question our seriousness and potential for making significant contributions, and thus may be less interested in collaborating with us.
4) Proof-of-principle experiment -- since some of the plasma parameters achieved in W-VIIA are fairly close, but not quite up to those usually associated with a "proof-of-principle" (POP) experiment, the next major step in the stellarator program should be a scaled, full "proof-of-principle" device. Such a device should simultaneously seek reactor-relevant plasma parameters in density, temperature, confinement, and β, and be large enough to have an impact somewhere in the range between PLT and TFTR. The U.S. should initiate, perhaps with international collaboration, an exploration of the various design options for this device. Further, the U.S. fusion program should begin very soon the process leading to a decision to undertake this full POP stellarator, particularly if it becomes clear that such a device is not going to be built elsewhere in the world.

In summary, the Stellarator Advisory Committee feels that stellarators have become a leading alternate concept that could become the principal toroidal confinement approach. It is now critical and urgent for the U.S. fusion program to develop an aggressive stellarator program, which should include one or more innovative, significant stellarator experiments, as soon as possible.

[From the New York Times, Sunday, June 1, 1980]

NEW FUSION DEVICE HAILED FOR ITS ENERGY POTENTIAL

(By Walter Sullivan)

A fusion device newly developed at an institute near Munich is being hailed by specialists in the field as a revival of an almost abandoned but now promising approach to harnessing the process that makes the sun shine.

It has encouraged hope for development of a continuously running fusion reactor. The giant, costly and complex Tokamak reactors now being built in this country, Britain, Japan and the Soviet Union will operate in pulses, a less efficient mode.

The new device, at the Max Planck Institute for Plasma Physics in Garching, a Munich suburb, is a modified version of the Stellarator, designed by Dr. Lyman Spitzer of Princeton University in the 1950's, when fusion energy research was in its infancy.

According to Dr. Harold P. Furth, research director at Princeton's Plasma Physics Laboratory, the German design is the most important development in fusion energy in more than a decade.

Like the Tokamaks, Stellarators magnetically confine and squeeze a very hot gas, or plasma, within a chamber shaped like a doughnut or pretzel. The goal is to create conditions sufficiently like those in the core of the sun for deuterium and tritium, two heavy forms of hydrogen, to fuse into helium, releasing energy.

It is partly in the novel arrangement of its magnetic coils that the West German machine, known as Wendelstein VII-A, differs from Tokamaks and earlier Stellarators. In both types of machine the problem is to generate magnetic fields configured to keep the very fast-moving plasma particles from striking the chamber walls.

In the original Stellarators this was done by wrapping the doughnut with wires and twisting it into a figure eight. In this configuration, however, particles and heat were lost from the confinement chamber at an alarming rate. It appeared that the problem would become even more severe in larger-scale devices. The Stellerator approach therefore dropped from favor.

An alternative design, known by its Russian term as the Tokamak, seemed more attractive. It produced a magnetic field spiraling around the inner walls of the chamber through a combination of two effects.

One effect was magnetism generated by coils wrapped around the chamber. The other was magnetism generated by driving an electric current around the central axis of the doughnut-shaped plasma.

Instabilities develop in plasmas confined in this manner, causing the particles to strike the chamber walls. Through tests with increasingly larger Tokamaks, however, the amount of instability has been reduced. Some such losses of particles would be acceptable in a pulsed machine that "started over again" every few seconds.

The new West German machine combines elements of both the Stellarator and Tokamak. It is doughnut-shaped and wrapped in magnetic coils designed so that an axial current is needed only for initial heating of the plasma. After that, heating is achieved by a process known as neutral beam injection.

This process had already been developed for the newer Tokamaks, notably at Princeton. The beam fires electrically neutral particles into the confinement chamber, increasing the plasma density and temperature.

In Wendelstein VII-A, the electric current of 20,000 amperes required for initial heating is only one-tenth that needed in Tokamaks and does not have to be cycled in the manner that limits present Tokamaks to pulsed operation. The machine generates relatively high plasma pressures with modest levels of magnetic confinement, an important test of its effectiveness.

[From Physics Today, August 1980]

GARCHING SHOWS STELLARATORS MAY BE GOOD AFTER ALL

Stellarators appear to be back in business. After a series of consistently disappointing results in the 1960's, Lyman Spitzer's scheme for plasma confinement in a toroidal fusion device was generally abandoned in the last decade by American magnetic-confinement researchers, in favor of the more promising tokamak concept.

But now a group at the Max Planck Institute for Plasma Physics in Garching, near Munich, seems to have demonstrated the equilibrium and confinement capability of the basic stellarator configuration. Gunther Grieger, Hermann Renner and their colleagues reported last month at the biennial International Conference on Plasma Physics and Controlled Nuclear Fusion in Brussels that their "Wendelstein VIIA" stellarator had successfully confined a plasma by external magnetic field coils alone—without requiring a circulation current in the plasma itself. Their stellarator not only maintained plasma confinement but also exhibited a fourfold improvement in energy confinement time when its ohmic heating current was shut off in favor of neutral-beam heating and a poloidal magnetic field generated by the helical coils characteristic of the stellarator design.

The revitalization of the stellarator scheme quickens the prospect of a toroidal fusion reactor that can operate in a steady-state mode without external power input.

In toroidal fusion reactors, the basic toroidal magnetic field is not sufficient to confine the plasma. The confining field must have a poloidal component, adding a helical twist to the primary toroidal field. The tokamak achieves this poloidal field component by inducing a toroidally circulating current in the plasma. The ohmic heating generated by this plasma current also helps to raise the temperature of the plasma toward the 10 keV needed for deuterium-tritium ignition.

The stellarator configuration, first attempted at Princeton in the 1950's, relies on helical coils wound around the torus rather than the ohmic plasma current to provide the necessary twist in the toroidal field. In the ensuing decade, stellarators of increasing size were built at Princeton and elsewhere—but they exhibited a puzzling and disheartening trend. First of all, one couldn't get the plasma very hot; the stellarators of that generation never exceed a plasma temperature of 200 eV. Furthermore, in contrast to the expectation of classical theory, the plasma confinement in these devices got worse with increasing plasma temperature. When it began to appear in the late 1960's that the early Russian tokamaks were producing much higher temperatures and pressures, Princeton converted its "Model C," the largest stellarator of its generation, into a tokamak.

With hindsight developed by extensive experience with tokamaks, it now appears that the problem with the early stellarators was not intrinsic to the stellarator concept. There is a magnetohydrodynamic limit to the current density a toroidal plasma can sustain without becoming unstable. The larger the "aspect ratio" (major/minor radius) of the torus, the lower is this limit on the ohmic current. Even though the stellarator does not require an ohmic current to twist the confining magnetic field, all stellarators use ohmic heating to raise the plasma temperature in the initial phase.

Harold Furth of Princeton told us that the striking improvements observed with the advent of tokamaks were largely attributable to their better (smaller) aspect ratios. They could be made much fatter than stellarators, because they were not encumbered by an extra layer of helical windings. With an aspect ratio of 20:1, the Model C was "simply too skinny," Furth explained, to support enough ohmic-heating current. When the helical stellarator windings were removed in 1969 for its metamorphosis to a tokamak, the Model C could be fattened by almost a factor of three, with a corresponding improvement in temperature and confinement.

The Garching group, by now well aware of the virtues of a small aspect ratio, tried to build the Wendelstein VII with an aspect ratio significantly smaller than 20:1. But the magnetic stresses on the helical coils in the proposed "fat" configuration turned out to be so high that they would have required considerable mechanical buttressing. To avoid the consequent construction delay, the minor radius of the plasma had to be reduced to 10 cm. With a major radius of 2 meters, the Wendelstein VIIA is thus left with an aspect ratio no better than that of the old Model C (though with twice the plasma radius.)

But nowadays the aspect ratio is no longer crucial for the achievement of high temperatures. Because it has become clear that tokamaks cannot achieve ignition temperatures by ohmic heating alone, neutral-beam injection has been developed in recent years as an additional source of plasma heating in tokamaks. The Wendelstein VIIA is the first stellarator that incorporates high-power neutral-beam injection. With this second heat source providing up to a megawatt of input power, the plasma current can be shut off after the initial ohmic-heating phase. With the complex stellarator windings making access difficult, it was no mean trick to inject the neutral beam into the plasma at a favorable angle. Although neutral-beam injection has made it possible to operate a stellarator with good confinement even at large aspect ratios, the 20:1 geometry of the Wendelstein VIIA may limit its β (plasma pressure/magnetic field pressure) to about half a percent. The higher pressures and densities necessary for a practical reactor would ultimately require a smaller aspect ratio.

The earlier stellarator project at Princeton having been named "Matterhorn," Grieger and his colleagues called their undertaking Wendelstein, after a modest Alpine foothill outside Munich—a deliberate act of humility. Unlike the racetrack-shaped Model C, the Wendelstein VIIA torus is circular. This avoids the special coils that were necessary in the Model C to smooth the transition between curved and straight sections. These transitional fields are believed by some to have contributed to the poor performance of the earlier machine.

Although the Wendelstein VIIA is significantly smaller than the current generation of large tokamaks, it and its counterparts in the Soviet Union, Britain and Japan have been doing at least as well as tokamaks of comparable size for several years now—without neutral-beam injection. Operating only with ohmic heating, these machines have shown very good values of the confinement parameter (density × energy confinement time), which now appears to be exhibiting the same favorable scaling behavior as one sees for tokamaks, with respect to temperature, density and size. This improved performance is the cumulative result of numerous small refinements of the stellarator design.

Furthermore, the helical stellarator field appears to prevent the rapid plasma breakup that can occur in tokamaks near the critical ohmic current density. (Such a violent plasma disruption could severely damage a reactor.) All this has generated considerable new enthusiasm for the stellarator concept around the world. But until the recent Garching results, no-one has been able to maintain a plasma of significant pressure in a pure stellarator mode—with the ohmic heating turned off.

Shutting off the ohmic heating has in the past always resulted in the loss of plasma confinement in the stellarator. Last fall, even after they had managed to squeeze their high-power neutral beam into the Wendelstein VIIA, the Garching group found that their plasma invariably got lost in a magnetohydrodynamic resonance as they attempted to reduce the plasma current to zero. But they have now found the trick. Instead of keeping the current in the helical stellarator coils constant as they turn down the plasma current, they gradually increase the helical current in a manner that just compensates for the loss of the plasma current. By keeping the poloidal magnetic field component approximately constant in this way during the transition, so that the offending resonant surface is kept out of the plasma, they find that confinement is maintained as the system goes over to the pure stellarator mode.

In the stellarator mode, with heating provided only by the neutral-beam injection, and the poloidal field component coming only from the helical windings, the energy confinement time of the plasma improves by a factor of four. The confinement time in the

Wendelstein VIIA increases from about 5 msec in the ohmic-heating phase to 20 msec in its pure stellarator phase. With a plasma density of 10^{14} cm^{-3}, this represents a confinement parameter of 2×10^{12} sec/cm^3—at least five times as high as attained by tokamaks of comparable size. Of course the plasma temperature achieved in the Garching stellarator is only 700 eV, an order of magnitude below what has been obtained in the Princeton PLT tokamak, with a plasma volume ten times that of the Wendelstein VIIA.

The most attractive feature of the stellarator concept as against tokamaks is that a stellarator reactor would operate in a steady-state mode. Because the plasma current in tokamaks must be induced by the transformer action of external induction coils, it can only operate in a pulsed mode. Even though the duration of the pulses in a tokamak reactor would be of the order of an hour, the lack of steady-state equilibrium presents a host of engineering problems. The time variation of heat load, for example, would exacerbate thermal fatigue in the reactor. In a pulsed machine one has to make provision for stresses and other parameters that are constantly varying in time. The attractiveness of steady-state fusion reactors has led a number of groups to begin looking into the possibility of a tokamak with an rf-driven ohmic plasma current.

But even such a steady-state tokamak would require continuous power input. T. K. Chu, a long-time partisan of stellarators at Princeton, told us that the stellarator is unique among magnetic-confinement concepts. It is the only scheme yet suggested, he believes, that promises a fusion reactor that would require no power input after it reaches ignition. Once the deuterium-tritium plasma starts to "burn," the neutral-beam injection could be shut off. (One does of course have to maintain steady confining currents in the external windings.)

Chu, Furth and their Princeton colleagues, Christiane Ludescher, John Johnson and Katherine Weimer, are currently addressing one of the less attractive features of stellarators. Tokamaks and stellarators both require a second set of external coils in addition to the windings that provide the primary toroidal confinement field. (For tokamaks this second set provides the induction that drives the plasma current.) The resulting elaborate systems of external windings make it difficult (if not impossible) to build either of these devices by modular construction—a serious drawback to the proliferation of practical reactors. Developing an earlier idea of Stephan Rehker and Horst Wobing at Garching, Chu and his colleagues are designing a simplified stellarator configuration, in which the poloidal field comes not from an extra set of coils but from a careful distortion of the primary coils. Instead of being simply circular, and thus providing only a toroidal field component, they would be warped into something resembling the periphery of a potato chip. But, Chu cautions, they would not be perfectly stacked "like 'newfangled' potato chips." To provide the desired helical twist in the confining field, the warp in each coil is rotated from that of its neighbor by a small poloidal angle. The trick is to provide an adequate poloidal field without warping the coils so much that they cannot withstand the severe magnetic stresses to which they are subjected.

The Garching success does not mean that we should now drop everything else in favor of stellarators, Furth stresses. The importance of the Wendelstein VIIA result, he told us, is that we now have two approaches that appear to be adequate. We are no longer rigidly tied to the tokamak as the only toroidal scheme that works. "My hope is that from somewhere in the tokamak-stellarator continuum there will emerge a steady-state toroidal reactor."

—BMS

Delegation on Randleman Lake

Richard Petty, Commissioner (Spokesman)
Randolph County Board of Commissioners

Joseph B. Griffith, Jr., Mayor
Town of Liberty

Bob Croft, Executive Director
Asheboro Chamber of Commerce

Lloyd Taylor, Mayor
City of Archdale

Dalton Fulcher, Manager
City of Archdale

William E. King, Councilman
Town of Jamestown

George Freeman, President, Freeman & Assoc.
High Point Chamber of Commerce

Fred Preyer, Vice-Chairman
Guilford County Board of Commissioners

Tom Routh, Chairman
Council on Community Development and Planning
Greensboro Chamber of Commerce

J. C. Dawkins, Mayor
City of Randleman

Phil Pendry, Manager
City of Randleman

Pat Shore
N. C. Department of Administration

Joanne Bowie, Councilperson
City of Greensboro

Joe Trogdon, Councilman
City of Asheboro

Larry Harvell, Manager's Representative
Guilford County

Jack Lail, Courier Tribune
Asheboro

J. Roscoe Adams, Councilman
City of High Point

Lindsay Cox, Executive Director
Piedmont Triad Council of Govts.

Carl Loop, Regional Planning Dir.
Piedmont Triad Council of Govts.

RESOLUTION OF GREENSBORO (N.C.) CHAMBER OF COMMERCE

WHEREAS, the Greensboro Chamber of Commerce represents 2,000 business and civic leaders concerned with the continued growth of the community; and

WHEREAS, an adequate supply of water is vital to the economic growth of the city and region; and

WHEREAS, long-range planning shows the need for development of an additional water source; and

WHEREAS, the proposed Randleman Reservoir is the most viable new source of water for this region of almost 300,000 people; and

WHEREAS, the proposed Randleman Reservoir would also provide the region with flood control and recreational services; and

WHEREAS, $3.9 million dollars previously budgeted for the Randleman Reservoir has been cut from the 1981 Federal Budget; and

WHEREAS, with land and construction costs rising, delay might render the project unfeasible.

NOW THEREFORE, be it resolved by the Board of Directors of the Greensboro Chamber of Commerce that while encouraging the President and the Congress in their efforts to reduce the budget in 1981, it reaffirms its support for the Randleman Reservoir Project as a priority item, that it endorses the restoration of funding for the Randleman Reservoir Project, and that a copy of this resolution be submitted to appropriate elected officials and other interested parties.

Adopted this 20th day of March, 1980.

RESOLUTION OF RANDOLPH COUNTY (N.C.) BOARD OF COMMISSIONERS

WHEREAS, many years of planning and study have been directed toward seeking the eventual construction of the Randleman Lake, which would be built on Deep River in Randolph County, just north of Randleman and lying in the Deep River water basin;

WHEREAS, the Randleman Lake is designed to overcome projection water short-fall in State Planning Region G by supplying local units of governments up to 48 million gallons per day;

WHEREAS, Randleman Lake is designed to have other benefits as well, including flood protection and recreation;

WHEREAS, this project has a high ratio of construction costs to benefits to be received;

WHEREAS, delays in the development of this project will be extremely costly due to many factors including the current high rate of inflation;

NOW, THEREFORE, BE IT RESOLVED by the Randolph County Board of Commissioners that in order to provide additional water supplies and other benefits to serve the future needs of the citizens of the region, and the municipalities in counties contained therein, the Randolph County Board of Commissioners hereby endorses and supports the Randleman Lake and urges the construction without delay and calls upon the present Administration and the U.S. Congress to provide necessary funding.

Adopted this the 10th of March, 1980

RESOLUTION OF GUILFORD COUNTY (N.C.) BOARD OF COUNTY COMMISSIONERS

WHEREAS, many years of planning and study have been directed toward seeking the eventual construction of the Randleman Lake, which would be built on the Deep River in Randolph County, just north of Randleman and lying in the Deep River Water Basin; and

WHEREAS, the Randleman Lake is designed to overcome projected water shortfalls in State Planning Region G by supplying local units of government up to 48 million gallons per day; and

WHEREAS, Randleman Lake is designed to have other benefits as well, including flood protection and recreation; and

WHEREAS, this project has a high ratio of construction costs to benefits to be received; and

WHEREAS, delays in the development of this project will be extremely costly due to many factors, including the current high rate of inflation;

NOW THEREFORE BE IT RESOLVED, by the Board of County Commissioners of Guilford County:

1. That in order to provide additional water supplies and other benefits to serve the future needs of the citizens of the region, and the municipalities in counties contained therein, the Board of County Commissioners of Guilford County hereby endorses and supports the Randleman Lake, urges its construction without delay and calls upon the present Administration and the United States Congress to provide the necessary funds.

STATEMENT OF JOSEPH B. GRIFFITH, CHAIRMAN, BOARD OF DELEGATES, PIEDMONT TRIAD COUNCIL OF GOVERNMENTS

The Piedmont Triad Council of Governments and its member local units of government seek a $500,000 appropriation for a new construction start on the Randleman Lake project during Fiscal Year 1982.

The Randleman Lake project is located in the heart of the Piedmont section of North Carolina and will be in the northern portion of Randolph County and the southern portion of Guilford County. The Randleman Lake project is multi-purpose and would benefit hundreds of thousands of citizens in flood control, water supply, and area redevelopment. However, water supply is the most demanding need for the heavily populated Upper Cape Fear River Basin.

Last year, resolutions of support were obtained from the affected local units of government in this highly industrial region (pages 4-15). In addition, we sent a delegation representing local units of government and the business community to Washington in March of 1980 (page 3). While in Washington, a spokesman for the delegation, Commissioner Richard Petty, of Randolph County, testified before the appropriate House and Senate subcommittees on the urgent need for the Randleman Lake project (page 2).

This year, local units of government have reaffirmed their support of the Randleman Lake project and have worked earnestly to proportion the 48 million gallons per day projected yield from initial request by the local units of government for 61 million gallons per day.

In addition, the local units of government have agreed that if environmental protection of the water supply can be obtained, that a decrease in recreational acreage around the lake will be acceptable. This reduction would insure that the project would recognize current economic conditions.

In considering appropriations for the Randleman Lake project, it is important to point out that it was the only new construction start project recommended by the Secretary of the Army for FY 1982, that 3.4 million dollars has already been spent on the planning and design of the facility and that this project has one of the highest cost benefit ratios of any water supply project undertaken by the Corps of Engineers in recent years.

In conclusion, this project is absolutely essential to the economic development of our region, delays will be costly not only in dollars but in the availability of water when needed, the availability of the land for the project itself. The magnitude of the project requires the partnership and commitment of over 50% of all project funds will come from local units of government and the State of North Carolina.

We ask that this project continue to receive high priority for funding at the earliest possible time to insure adequate water supply for the citizens of our Region.

RESOLUTION OF REIDSVILLE (N.C.) CITY COUNCIL

WHEREAS, many years of planning and study have been directed toward seeking the eventual construction of the Randleman Lake, which would be built on the Deep River in Randolph County, just north of Randleman and lying in the Deep River Water Basin;

WHEREAS, the Randleman Lake is designed to overcome projected water shortfalls in State Planning Region G by supplying local units of government up to 48 million gallons per day;

WHEREAS, Randleman Lake is designed to have other benefits as well, including flood protection and recreation;

WHEREAS, this project has a high ratio of construction costs to benefits to be received;

WHEREAS, delays in the development of this project will be extremely costly due to many factors, including the current high rate of inflation;

NOW THEREFORE BE IT RESOLVED BY THE REIDSVILLE CITY COUNCIL:

That in order to provide additional water supplies and other benefits to serve the future needs of the citizens of the region, and the municipalities in counties contained therein, the Reidsville City Council hereby endorses and supports the Randleman Lake, urges its construction without delay and calls upon the present Administration and the United States Congress to provide the necessary funds.

This the 13th day of March, 1980.

RESOLUTION OF ROCKINGHAM COUNTY (N.C.) BOARD OF COMMISSIONERS

WHEREAS, many years of planning and study have been directed toward seeking the eventual construction of the Randleman Lake, which would be built on the Deep River in Randolph County, just north of Randleman and lying in the Deep River Water Basin;

WHEREAS, the Randleman Lake is designed to overcome projected water shortfalls in State Planning Region G by supplying local units of government up to 48 million gallons per day;

WHEREAS, Randleman Lake is designed to have other benefits as well, including flood protection and recreation;

WHEREAS, this project has a high ratio of construction costs to benefits to be received;

WHEREAS, delays in the development of this project will be extremely costly due to many factors, including the current high rate of inflation;

NOW, THEREFORE, BE IT RESOLVED, by The Rockingham County Board of Commissioners, that in order to provide additional water supplies and other benefits to serve the future needs of the citizens of the region, and the municipalities in counties contained therein, the Commissioners hereby endorses and supports the Randleman Lake, urges its construction without delay and calls upon the present Administration and the United States Congress to provide the necessary funds.

Date: March 3, 1980

RESOLUTION OF ASHEBORO (N.C.) CITY COUNCIL

WHEREAS, many years of planning and study have been directed toward seeking the eventual construction of the Randleman Lake, which would be built on the Deep River in Randolph County, just north of Randleman and lying in the Deep River Water Basin;

WHEREAS, the Randleman Lake is designed to overcome projected water shortfalls in State Planning Region G by supplying local units of government up to forty-eight (48) million gallons of water per day;

WHEREAS, Randleman Lake is designed to have other benefits as well, including flood protection and recreation;

WHEREAS, this project has a high ratio of construction costs to benefits to be received;

WHEREAS, delays in the development of this project will be extremely costly due to many factors, including the current high rate of inflation;

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Asheboro, North Carolina:

That in order to provide addition water supplies and other benefits to serve the future needs of the citizens of the region, and the municipalities in the county contained therein, the City of Asheboro hereby endorses and supports the Randleman Lake, urges its construction without delay and calls upon the present Administration and the United States Congress to provide the necessary funds.

ADOPTED during a special meeting of the City Council of the City of Asheboro, North Carolina on this, the fourteenth day of March, 1980.

RESOLUTION OF ARCHDALE (N.C.) CITY COUNCIL

WHEREAS, MANY YEARS OF PLANNING AND STUDY HAVE BEEN DIRECTED TOWARD SEEKING THE EVENTUAL CONSTRUCTION OF THE RANDLEMAN LAKE, WHICH WOULD BE BUILT ON THE DEEP RIVER IN RANDOLPH COUNTY, JUST NORTH OF RANDLEMAN AND LYING IN THE DEEP RIVER WATER BASIN;

WHEREAS, THE RANDLEMAN LAKE IS DESIGNED TO OVERCOME PROJECTED WATER SHORTFALLS IN STATE PLANNING REGION G BY SUPPLYING LOCAL UNITS OF GOVERNMENT UP TO 48 MILLION GALLONS PER DAY;

WHEREAS, RANDLEMAN LAKE IS DESIGNED TO HAVE OTHER BENEFITS AS WELL, INCLUDING FLOOD PROTECTION AND RECREATION;

WHEREAS, THIS PROJECT OFFERS BENEFITS, ACCESSIBLE TO A HIGH PROPORTION OF THE POPULATION OF REGION G, WHICH ARE NECESSARY AND VITAL TO THE AREA;

WHEREAS, DELAYS IN THE DEVELOPMENT OF THIS PROJECT WILL BE EXTREMELY COSTLY DUE TO MANY FACTORS, INCLUDING THE CURRENT HIGH RATE OF INFLATION;

NOW, THEREFORE BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF ARCHDALE:

1. THAT IN ORDER TO PROVIDE ADDITIONAL WATER SUPPLIES AND OTHER BENEFITS TO SERVE THE FUTURE NEEDS OF THE CITIZENS OF THE REGION AND THE MUNICIPALITIES IN COUNTIES CONTAINED THEREIN, THE CITY OF ARCHDALE HEREBY ENDORSES AND SUPPORTS THE RANDLEMAN LAKE, URGES ITS CONSTRUCTION WITOUT DELAY AND CALLS UPON THE PRESENT ADMINISTRATION AND THE UNITED STATES CONGRESS TO PROVIDE THE NECESSARY FUNDS.

DATE: MARCH 25, 1980

RESOLUTION OF HIGH POINT (N.C.) CITY COUNCIL

WHEREAS, many years of planning and study have been implemented toward seeking the eventual construction of the Randleman Reservoir Project which would be built on the Deep River in Randolph County just north of Randleman and lying in the Deep River water basin;

WHEREAS, from time to time the City of High Point has expressed a genuine interest in this project as a source for future water supply to serve Guilford County and the municipalities therein;

WHEREAS, through cooperative efforts between the City of High Point and the City of Greensboro, these two municipal water systems are furnishing water in various areas of Guilford County as well as within their own cities;

WHEREAS, in the opinion of the City Council, it is deemed in the best interest of the City to support the Randleman Reservoir Project and to urge its construction at an early date in order to provide additional water resources to serve the needs of this general area in the years ahead;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HIGH POINT:

1. That in order to provide additional water supplies to serve the future needs of the citizens in Guilford County and the municipalities contained therein, the City Council hereby endorses and supports the Randleman Reservoir Project and urges its construction in the reasonable foreseeable future.

2. That in cooperation with Guilford County, Greensboro and other participating Governmental Units, it is the intent of the City to pledge its support of the non-federal share of the cost of the proposed project by financing its prorata share of water supply costs.

Roy B Culler Jr.

Roy B. Culler, Jr.
Mayor

ATTEST:

Patricia Paris Simmons

Patricia Paris Simmons
City Clerk

Resolution of Greensboro (N.C.) City Council

RESOLUTION SUPPORTING THE RANDLEMAN RESERVOIR PROJECT AND ASSURING THE U. S. CORPS OF ENGINEERS OF THE CITY'S INTENT TO SHARE IN THE NON-FEDERAL COST THROUGH LOCAL FINANCES

WHEREAS, many years of planning and study have been implemented toward seeking the eventual construction of the Randleman Reservoir Project which would be built on the Deep River in Randolph County just north of Randleman and lying in the Deep River water basin;

WHEREAS, from time to time the City of Greensboro has expressed a genuine interest in this project as a source for future water supply to serve Guilford County and the municipalities therein;

WHEREAS, by resolution adopted on 26 June 1964 the City Council officially expressed an interest in said project and submitted an affidavit expressing its interest to the U. S. Corps of Engineers;

WHEREAS, on 2 June 1977 the City Council adopted a resolution requesting the U. S. Congress to approve funding for a comprehensive water resources study of the Guilford County area which study would have evaluated the Randleman Reservoir Project as a viable source of water supply to serve the people's needs;

WHEREAS, through cooperative efforts between the City of High Point and the City of Greensboro, these two municipal water systems are furnishing water in various areas of Guilford County as well as within their own cities;

WHEREAS, in the opinion of the City Council, it is deemed in the best interest of the City to support the Randleman Reservoir Project and to urge its construction at an early date in order to provide additional water resources to serve the needs of this general area in the years ahead;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GREENSBORO:

1. That in order to provide additional water supplies to serve the future needs of the citizens in Guilford County and the municipalities contained therein, the City Council hereby endorses and supports the Randleman Reservoir Project and urges its construction in the reasonable foreseeable future.

2. That in cooperation with Guilford County, High Point and other participating Governmental Units, it is the intent of the City to pledge its support of the non-federal share of the cost of the proposed project through its prorata share of local finances.

The foregoing resolution was adopted
by the City Council of the City of
Greensboro, N. C. on
29 Nov 79
Nancy J. McLeak
City Clerk

STATEMENT OF MRS. CAROLINA BUTLER, ANCHORMAN, COMMITTEE TO SAVE FORT McDOWELL RESERVATION

The proposed Orme Dam if built will force the relocation of the Yavapai tribe of the Fort McDowell Reservation (located a few miles northeast of Phoenix). The tribe is opposed to relocation, they have voted against Orme Dam three times.

Orme Dam has been pushed by local media and political propoganda for flood control for Phoenix, a city which has done little to help itself. Residents have even turned down local bond issues for flood control. Low cost flood insurance is ignored.

Why should the Fort McDowell Indians who live along the Verde River but do not get flooded be moved out of their homes to build Orme Dam so that people who live in the flood plain can remain in theirs?

Exactly how many homes were damaged? Based upon applications for assistance Arizona's Division of Emergency Services said: 100 along the Salt River and 26 along the Gila. These figures are from last year's February flood which was the biggest since 1891. For comparison, Phoenix is currently in the process of relocating 6,000 residents around the Sky Harbor airport because they live in a "noise zone" so why can't they move those who live in a "flood zone?"

Local politicians keep saying that without Orme Dam they cannot build the Rio Salado Project, a scheme to build more in the flood plain. What these politicians never say is that Phoenix voters turned down the Rio Salado in a bond election.

Why do we have laws to protect animal species but not people? The U.S. government has moved the Yavapai tribe around in the past, soldiers killed them, imprisoned them, and their numbers have dwindled. This small American Indian tribe sits on the brink of survival while Phoenix, a modern industrialized city, has prospered because of what the government seized from this tribe in the past.

Phoenix already has six dams sitting upstream on land taken years ago from this same tribe. Relocation again of the Yavapais is unspeakably outrageous.

Who in Washington represents this small defenseless tribe? They are in Rep. Eldon Rudd's (approp. comm. member) district but he has never been out to Fort McDowell to talk with them. Nor has Sen. Dennis DeConcini (approp. comm. member).

Please do not appropriate funding for Orme Dam, do not force the relocation of the Fort McDowell Indians. Thank you.

RESOLUTION OF LIBERTY (N.C.) TOWN COUNCIL

WHEREAS, many years and planning and study have been directed toward securing the eventual construction of the Randleman Lake; and

WHEREAS, the Randleman Lake is designed to supply local units of government up to 48 million gallons per day; and

WHEREAS, the delays in this project will be extremely costly;

NOW THEREFORE BE IT RESOLVED, by the Town Council of the Town of Liberty that in order to provide additional water supplies and other benefits to serve the future needs of our region the Town Council hereby endorses the Randleman Lake Project, urges its construction without delay, and calls upon the present administration and the United States Congress to provide the necessary funds.

STATEMENT OF NORMAN S. IVEY, GENERAL MANAGER, ASSISTANT VICE PRESIDENT, AMERICAN COMMERCIAL BARGE LINE CO.

I am writing on behalf of the American Commercial Barge Line Company which operates a fleet of towboats and barges on the Inland rivers and canal system of the country to provide service to the various Industries located along these waterways. We wish to express our support for the initiative being undertaken by the Warrior-Tombigbee Development Association to improve navigation on the Warrior-Tombigbee Waterway.

Included in our transportation system is the movement of coal from Holt, Alabama, Port Osborne and Coal Systems Dock at Mile 372 on the Warrior River to Gulfport, Mississippi. These cargoes move down the Black Warrior, through the Port of Mobile and West to the Gulf Intracoastal Canal. In 1980, these movements accounted for approximately 850,000 tons of cargo. In addition to these volumes, we also were involved in the movement of a number of loads of scrap, alumina and chemicals through the Port of Mobile on a high volume basis for over five years and we anticipate increased volumes of movements in the future due to the significant development of coal resoures in the area served by the Waterway. During this time we have developed what we feel is the most efficient method of operating along the subject Waterway. Our tows, when conditions permit, consist of six barges and a bow steering unit, rather than the four-barge tow traditionally operated along this Waterway. This configuration leads to improvements in fuel efficiency as well as savings in capital and manpower. Improved channel maintenance coupled with expanded capacity at Oliver Lock will lead to increased use of this type tow which in turn would lead to reductions in the cost of transportation, making the products of this region more competitive in U.S. and world markets.

Another project supported by the Warrior-Tombigbee Development Association that has significant potential is the deepening of the Port of Mobile. Some analysts have been quoted as saying that the delivered price of U.S. coal exported through Gulf ports to European markets by over $6.00 per ton if the Gulf ports could accomodate the larger vessels now plying the world's oceans. More efficient river operations coupled with the improved channel depts that will accomodate large ocean-going vessels should greatly enhance the competitive position of U.S. coal in the world market place. As a nation chronically fighting balance of payment problems due to the high cost of importing fuel, a program leading to an improved export position should enjoy widespread support.

In closing, I would like to say that if our Company can be of any further assistance in providing input regarding this matter, please advise.

STATEMENT OF THE NATIONAL LEAGUE OF CITIES

The National League of Cities, representing 15,000 municipalities, appreciates the opportunity to state for the record our concerns over some of the proposed budget cuts in water resources programs.

While we applaud the President's efforts to balance the fiscal 1982 budget, we are dismayed and alarmed at the Administration's proposal to eliminate funding for the Department of Interior's Office of Water Research and Technology and the Research Institutes in the field. NLC believes that the saline program is advanced to the point where the private sector can assume a larger role. But we are disturbed at the prospect of the total elimination of other important OWRT programs. Combined with the loss of the Water Resources Council and the Council on Environmental Quality, the proposed elimination of OWRT will mean that there will be no significant research or technology transfer on critical water resource issues at the Federal level. These actions could have a far-reaching and negative impact on the health of the nation's cities.

Developments in recent years have shown that no section of the country is immune to water resource problems. Regional water shortages and deterioration of water quality are already serious in some areas. Competition among different uses of water -- for food production, power generation, and industrial use -- further aggravate existing water shortages. Inflation and escalating energy costs are driving up the costs of water development projects.

The National League of Cities supports practical research and development efforts which are aimed at providing a safe and dependable supply of water in a cost-effective manner. However, the cost of obtaining the information needed to choose among alternative water resource solutions is prohibitive for individual units of local governments already operating within very tight budgetary and resource base constraints. There is an appropriate Federal role in the water resources area -- the provision of technical assistance and access to valuable research and development information to local governments so that local officials can cope with existing and emerging water resource problems.

Nowhere is the need for this information more critical than in urban areas, where cities depend on adequate water supplies to provide for fire protection, domestic use, sanitation, commercial development and recreation. The information is particularly important today as cities all across the country embark on industrial revitalization programs to promote economic growth and provide new jobs.

NLC hopes that the Federal government will continue to support adequate water resources research and development and technology transfer programs through OWRT in the future.

STATEMENT OF JON LINDSAY, COUNTY JUDGE, HARRIS COUNTY, TEX.

The people of Harris County are very appreciative of your leadership and the support of your Subcommittee in the development of an effective federal flood control program. We particularly are grateful for your past support of vitally needed flood control projects in Harris County.

We appreciate the severe budget constraints which you and your Subcommittee face this year. We fully realize that priorities have to be set. All of the projects located in Harris County and included in the President's budget are proposed to be funded at minimum levels. Because of the number of people affected, each of these projects should continue to be given a high priority. These projects are critical to the development of Harris County's flood control program.

The Harris County flood control projects listed below are included in the Corps of Engineers' FY1982 budget request:

1. BUFFALO BAYOU AND TRIBUTARIES

Project	Type	FY1982 Budget Request	Capability
Flood Control	Operations & Maintenance	$4,111,000	$5,056,000
Flood Damage Prevention	Surveys	800,000	800,000

COMMENTS--The Buffalo Bayou watershed is located in southeast Texas, in Harris County within the Gulf Coast Coastal Plains Region. Major tributaries are White Oak Bayou, Brays Bayou, Sims Bayou, Hunting Bayou and Greens Bayou. The Buffalo Bayou watershed has a drainage area of approximately 358 square miles, of which approximately 267 square miles are controlled by the Addicks and Barker reservoir. The remaining 91 square miles are unregulated. There is a difference of $945,000 between the budget request and the capability level. Additional funding of $345,000 would be used for fensing at Addicks Reservoir. An additional $600,000 would be used for dam safety assurance studies at Addicks and Barker dams.

2. CLEAR CREEK

Flood Control	Advance Engineering & Design	300,000	300,000

COMMENTS--The Clear Creek watershed is contained in four counties. Harris, Galveston, Brazoria and Fort Bend. This particular project includes the clearing of a channel in Clear Creek 31 miles upstream from Clear Lake. The project will eventually enlarge and deepen the 35-mile long Creek. Clear Creek runs from Fort Bend County past Pearland and Friendswood to Clear Lake and Galveston Bay. The FY1982 budget request and capability figures are the same.

3. HOUSTON SHIP CHANNEL

Navigation	Operations & Maintenance	5,656,000	12,666,000

COMMENTS--The Port of Houston is the third busiest in the United States. The operations and maintenance projects are of major import to the continued sound activities of the Ship Channel. The section of the channel near Lost Lake has become a dangerous situation for ships, with silt decreasing the channel depth from 40 feet to 30 feet.

The additional funding to reach the capability level would be in the amount of $2,333,000 to dredge the area from Bolivar Road to Red Fish Reef, and $4,680,000 to rehabilitate the disposal area at Lost Lake and Spilmans' Island.

4. LITTLE CYPRESS CREEK

Project	Type	FY1982 Budget Request	Capability
Flood Damage Prevention	Surveys	$270,000	$270,000

COMMENTS--Little Cypress Creek is located in the northern part of Harris County. A great deal of development has taken place in the area surrounding the Creek, which is a major tributary of Cypress Creek watershed. Little Cypress drains about 53 square miles of the Cypress Creek watershed. Non-structural floodplain management is currently underway in the Cypress Creek area.

The FY1982 budget request and capability figures are the same.

5. SAN JACINTO RIVER

Flood Damage Prevention	Surveys	$100,000	$300,000

COMMENTS--When the original Corps of Engineers' budget was submitted in January, 1981, $300,000 was requested for the San Jacinto River project. However, this project is one of those affected by President Reagan's FY1982 budget revisions, and the amount was reduced to $100,000 in March, 1981. The additional $200,000 would be used for an interim study of Lake Creek and the west fork of the San Jacinto River.

6. UPPER WHITE OAK BAYOU

Flood Damage Prevention	Surveys	$400,000	$400,000

COMMENTS--White Oak is a tributary of Buffalo Bayou. It is a rapidly growing residential area which has flooded four times since 1968, causing millions of dollars worth of damage. The survey work would greatly assist in the alleviation of these ongoing flooding difficulties. The FY1982 budget request and the capability figures are the same.

7. VINCE AND LITTLE VINCE BAYOUS

Flood Control	Construction	$450,000	$450,000

COMMENTS--Located in Pasadena in Harris County, Vince and Little Vince Bayous' flood control project involves widening and deepening parts of the bayous which are major runoffs of the city. The FY1982 budget request and the capability level indicated by the Corps are the same for the construction.

We consider these projects vital to the safety and long range development of these areas. Flood control problems are of primary concern to Harris County. An estimated $434 million worth of damages was incurred in the last three floods in the County, affecting more than 40,000 persons.

Therefore, these budgetary needs are essential, in terms of both local concerns and the national interest. Your support of the funding levels will provide timely relief from destructive floods at critical locations, and prevent further harm to life and property.

Your favorable consideration of these requests will be greatly appreciated.

STATEMENT OF DARLAN BRIN, COMMISSIONER, DEPARTMENT OF CONSERVATION AND CULTURAL AFFAIRS OF THE GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES

The Virgin Islands are in a precarious position at present with respect to water. The daily demand is not being met by the present supply and distribution system. Frequent power outages interrupt the flow of water from the islands main water producers, the Virgin Islands Water and Power Authority's desalination plants. Water storage capabilities of more than a few days supply are virtually impossible because of leaking storage tanks. The many non-registering meters, unmetered connections, and leaks in the distribution system contribute to a significant portion of water that cannot be accounted for. Water quality problems are attributed to the age and condition of the pipes and other equipment within the distribution system. The lack of constant water pressure in the pipes caused by an inadequate supply of water, leads to further contamination from intrusion by salt water through cracks in the pipes.

The problems stated above cause the Virgin Islands Government to spend millions of dollars each year to provide water from other sources. Water is barged in from nearby Puerto Rico at great expense. Water is purchased from local water suppliers with private wells, also at a high cost. All this money that is going into purchasing water could be used to up-grade the present system. However, repairs on the system is not an instant solution. It takes time and it takes planning. In the meantime the immediate water needs of the residents have to be met somehow.

The Virgin Islands Government has been coping with the immediate problem of water supply, as well as the long rage solutions of planning for an efficient supply/distribution system for the future. Local funds are not sufficient to undertake all of these activities. The Virgin Islands depend on federal funds to augment their budget, enabling them to undertake the activities necessary to solve their critical water problems.

The Department of Conservation and Cultural Affairs receives funding from both the USEPA and the USWRC for water planning activities. The mandates of these two agencies are distinct and as such, are reflected in the different approaches taken by each of these agencies in assisting the states.

Environmental Protection Agency funds planning and projects that will enable states to attain compliance with Federal Environmental laws.

The WRC's aid to states deals with more comprehensive types of activities. WRC has been involved in groundwater research and water conservation planning strategies prior to EPA and has developed information which has been invaluable to states involved in these areas. WRC leadership in water conservation efforts, not only in R&D, but assisting states to draft and Implement Water Conservation programs, far exceeds that of EPA.

Because of our scarce natural supply of water, conservation has had and will continue to play an important role in the Virgin Islands. Whereas before it was just done out of necessity as water availability fluctuated, the Virgin Islands are in the process of developing a water conservation policy that will guide all future water planning activities.

WRC allows states more latitude in designing and implementing programs that suit their particular needs, as well as structuring the program so that it meets WRC requirements.

WRC funding is very important to the Virgin Islands, since without it, completion of the Comprehensive Water Resource Management Program will be impossible. This project is dependent on both sources of funding, EPA and WRC.

STATEMENT OF MIKE MCDOWELL, EXECUTIVE DIRECTOR, COMMITTEE ON POWER FOR THE SOUTHWEST

The Committee on Power for the Southwest, an association of rural electric cooperatives and municipal electric systems in the six state area served by the Southwestern Power Administration, submits the following comments on the Fiscal Year 1982 budget request of SWPA.

Our members are preference customers of SWPA under provisions of the Flood Control Act of 1944. The efficient operation of this agency is of major concern to us. We believe the budget request submitted by SWPA for 1982 would provide the agency with sufficient funds for good operating efficiency.

We believe that SWPA must have a financial base sufficient to meet its obligations to repay both principal and interest on the federal investment in hydro electric facilities in the region. Accordingly, the Committee on Power for the Southwest supported the recent rate increase implemented by SWPA. Preference customers were afforded meaningful input into the rate making process and made a significant contribution to the finally adopted rates.

Reliable service from SWPA is vital to our members. The FY 1982 budget request of Southwestern Power Administration, if approved, will provide for continued reliable service for preference customers.

In addition to these concerns, we believe SWPA must maintain a constructive interest in regional electric industry problems. The region has seen increased cooperation among investor and consumer owned utilities in recent years. SWPA has encouraged cooperative relationships to the benefit of electric ratepayers throughout the region. It is refreshing to deal with at least one government agency that attempts to assist in problem solving.

It is our hope that you will approve the FY 1982 budget of SWPA as submitted.

STATEMENT OF RICHARD PETTY, COMMISSIONER, RANDOLPH COUNTY, NEBR.

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE: I WOULD LIKE TO THANK YOU ON BEHALF OF THE PEOPLE OF PIEDMONT NORTH CAROLINA FOR THE OPPORTUNITY TO APPEAR BEFORE YOU TODAY. I WISH TO DISCUSS OUR NEED FOR WATER.

MY NAME IS RICHARD PETTY, A COMMISSIONER OF RANDOLPH COUNTY. I HAVE WITH ME STATE OFFICIALS AND OFFICIALS OF THREE CHAMBERS OF COMMERCE, SIX CITIES AND TWO COUNTIES CONCERNED WITH THE FUTURE OF OUR REGION. WE ASK THAT 3.9 MILLION DOLLARS BE ADDED TO THE 1981 BUDGET SO WORK CAN CONTINUE ON RANDLEMAN LAKE--A CORPS OF ENGINEERS PROJECT IN OUR AREA.

THE CRITICAL NEED FOR THIS PROJECT IS DUE TO OUR GEOGRAPHY. MUCH OF NORTH CAROLINA'S POPULATION AND INDUSTRIAL DEVELOPMENT IS CONCENTRATED WITHIN THE CENTER OF THE STATE, CALLED LOCALLY THE "PIEDMONT CRESCENT." THE GREENSBORO AND HIGH POINT URBAN AREAS LIE IN THE CENTER PORTION OF THE PIEDMONT CRESCENT. THEY ARE IN THE UPPER CAPE FEAR RIVER BASIN AND THEIR WATER SUPPLIES COME FROM THE HEADWATERS OF THE BASIN. HOWEVER, THE AMOUNT OF WATER IN THE UPPER BASIN IS LIMITED, AND ACCESS TO AN ADEQUATE WATER SUPPLY IS CRITICAL.

IN THE 1940'S, THE CORPS OF ENGINEERS AND OTHERS SAW THE POTENTIAL CONFLICT BETWEEN GROWTH AND LIMITED WATER SUPPLY IN OUR AREA, SO THEY BEGAN PLANNING THE RANDLEMAN LAKE. THE PRIME PURPOSE OF THIS PROJECT IS WATER SUPPLY. WE NEED THIS SUPPLY FOR HUMAN CONSUMPTION. OTHER BENEFITS INCLUDE FLOOD PROTECTION AND RECREATION. THE PLANNING IS COMPLETE, ENVIRONMENTAL REQUIREMENTS HAVE BEEN SATISFIED, AND THE PROJECT IS READY TO GO.

WHY DO WE NEED THIS PROJECT? OUR EXISTING RESOURCES WILL BE INSUFFICIENT IN SOME COMMUNITIES BY 1993--ONLY 13 YEARS AWAY! BY THE YEAR 2000, SOME AREAS IN THE BASIN COULD FACE A SHORTFALL OF UP TO 14 MILLION GALLONS PER DAY. AND, BY THE YEAR 2020, WE EXPECT TO NEED 49 MILLION GALLONS PER DAY MORE THAN WE HAVE.

WE WILL PARTICIPATE FINANCIALLY IN THE RANDLEMAN LAKE PROJECT. LOCAL GOVERNMENTS WILL REIMBURSE THE FEDERAL GOVERNMENT FOR ALL WATER SUPPLY COSTS NOW ESTIMATED TO BE 40 PERCENT OF THE TOTAL PROJECT COST. HOWEVER, WITHOUT THE PROJECT PROCEEDING AS ORIGINALLY SCHEDULED, DEVELOPMENT PRESSURES WILL MAKE IT INCREASINGLY DIFFICULT TO BRING THIS PROJECT ON LINE AND EVERY DELAY WILL ADD GREATLY TO THE COST.

WE ARE ON A COLLISION COURSE. WE NEED HELP NOW IF WE ARE TO PROVIDE THE WATER NEEDED TO MEET OUR FUTURE DEMANDS. IN THESE TIMES OF TIGHT MONEY, WE MUST MAKE WISE INVESTMENTS FOR THE FUTURE. THE RANDLEMAN LAKE PROJECT REPRESENTS SUCH AN INVESTMENT. WE ARE ASKING YOU FOR 3.9 MILLION DOLLARS IN THE 1981 BUDGET TO AUTHORIZE CONSTRUCTION OF THIS PROJECT.

THANK YOU, MR. CHAIRMAN, FOR THE OPPORTUNITY TO APPEAR BEFORE YOUR COMMITTEE AND TO TALK ABOUT THE NEEDS AND UNIFIED DESIRES OF PIEDMONT NORTH CAROLINA.

LETTER FROM M. L. SMITH, MISSOURI PACIFIC RAILROAD CO.

February 9, 1981

File: LB-White River

Senator Mark Hatfield, Chairman
Senate Appropriations Committee
Washington, DC 20510

Dear Senator Hatfield:

The Corps of Engineers has submitted, to various federal agencies and the Governor of Arkansas, an EIS and Feasibility Report on a 9-foot navigation project on the White River. Based on January 1980 costs and a 7-1/8% discount interest rate, the Corps estimates the benefit/cost ratio to be 1.1.

In recent years, and while the Corps was actively gathering data for the Feasibility Report, substantial increases in annual operations and maintenance cost have occurred, without any meaningful increase in tonnage.

The Corps of Engineers Fiscal Year 1982 Civil Works Budget Request includes $1,843,000 for operation and maintenance of the White River. This represents a 70% increase over the previous year's appropriation.

This is an obvious subterfuge to increase the annual O&M expenditure on the "existing project" to obtain a favorable benefit/cost ratio on the 9-foot navigation project currently under consideration. It is interesting to note in the Corps' "Supplement to the White River Navigation to Batesville, AR Feasibility Report - Revised December 1980" the added annual O&M cost of the recommended plan is $778,700, which is almost exactly the increase recommended in the FY 1982 budget request.

The attached statement shows historical O&M cost and barge tonnage on the White River. Since the high traffic year of 1965, tonnage has decreased 31% while O&M expenditures increased 940%.

Would you please make this part of the record and give it consideration when the Corps Civil Works budget request is before your committee.

Sincerely,

M. L. Smith

STATEMENT I

WHITE RIVER NAVIGATION

OPERATIONS AND MAINTENANCE COST

FISCAL YEAR	ACTUAL COST	CUMULATIVE COST	TONS/YEAR	COST/TON
1962	$ 186,660	$ 186,660	539,099	$ .35
1963	176,976	363,636	401,909	.44
1964	181,696	545,332	521,510	.35
1965	177,207	722,539	879,251	.20
1966	148,755	871,294	689,815	.22
1967	160,313	1,031,607	457,816	.35
1968	137,030	1,168,637	534,029	.26
1969	150,986	1,319,623	544,238	.28
1970	183,385	1,503,008	642,819	.29
1971	266,766	1,769,774	577,477	.46
1972	272,935	2,042,709	646,004	.42
1973	311,911	2,354,620	574,077	.54
1974	273,756	2,628,376	697,978	.39
1975	656,598	3,284,974	624,292	1.05
1976	588,657	3,873,631	830,027	.71
1977	534,258	4,407,889	660,000	.81
1978	527,664	4,935,553	610,028 2/	.87
1979	1,260,000 1/	6,195,553		2.07 4/
1980	925,000 1/	7,120,553		1.52 4/
1981	1,084,000 1/	8,204,553		1.78 4/
1982	1,843,000 3/	10,047,553		3.02 4/

1/ Budget appropriation.

2/ Source - Waterborne Commerce Statistics Center.

3/ Budget request.

4/ Based on year 1978 tonnage.

STATEMENT OF CONGRESSMAN WILLIAM F. CLINGER, JR.

I would like to request that this Committee favorably consider including in its 1982 budget funding for Phase II Advanced Engineering and Design for the Flood Protection Project at Lock Haven, Pennsylvania, the first step in the construction process.

Lying at the confluence of the West Branch of the Susquehanna River and Bald Eagle Creek, Lock Haven has suffered a major flood on the average of once every seven years. The flood following tropical storm Agnes in 1972 devastated the city and prompted a Corps flood protection feasibility study. The Water Resources Development Act of 1976 authorized Phase I Engineering and Design for a flood wall and levee system to protect the city from future flooding. Phase I has been completed and the project approved by the Board of Engineers for Rivers and Harbors.

Authorization for construction of the Lock Haven project was included in Section 117 of H.R. 4788, the Water Resources Development Act of 1979 passed by the House of Representatives during the 96th Congress. It was also included in Section 103 of S. 703, under consideration last year by the Senate Committee on Environment and Public Works. The Lock Haven project has strong support in Congress; it is not one of the projects about which the Carter administration expressed reservations, and we expect it to be included in the next Water Resources Development Act to be enacted into law.

It is very important that funding for the Lock Haven project be made available promptly so that work on this vital project can continue without major interruption. The city's major industries sustained severe loss during the Agnes flood and have remained in Lock Haven largely because of the promise offered by this flood control project. I would like to cite one example of the importance of flood control to Lock Haven's economic health.

A year ago, Piper Aircraft, the largest employer in Lock Haven and indeed in my Congressional district, announced plans to remove production of its Cheyenne I and II lines from Lock Haven, which would mean the loss of at least 700 jobs from the area. This was widely perceived as a first step towards Piper's closing down its entire Lock Haven operation, which would mean the direct loss of 2500 to 3000 jobs and the indirect loss of many more. Following the inclusion of authorization for the Lock Haven project in the House omnibus bill, however, Piper suspended its plans to move its operations from the city.

You can see that it is vitally important to the city, to Clinton County, and to the region that the promise offered by authorization of the Lock Haven project be fulfilled by prompt funding. These local supporters of the project hope to see Phase II construction begin as soon as practically possible.

STATEMENT OF DONALD W. MOOS, DIRECTOR, WASHINGTON STATE DEPARTMENT OF ECOLOGY

The Reagan administration has proposed a rescission of $5 million in FY 81 state grant program funds under Title III of the Water Resources Planning Act (P.L. 89-80) which is administered by the U.S. Water Resources Council. The administration has also proposed to eliminate the Water Resources Council in FY 82.

The State of Washington appreciates this opportunity to provide testimony and to express a concern over these proposals.

In recent years, the Federal Government has emphasized the need for state leadership in water resources activities. The Washington State Department of Ecology has found it increasingly difficult to adequately represent the citizens of the State of Washington before the numerous Federal agencies with much larger budgets. For example, FY 81 expenditures for water resources planning in Washington State by the Army Corps of Engineers, Department of the Interior, Department of Agriculture, and the Department of Energy are estimated to total $6,868,000. For the same period, Federal water resources planning assistance to the state was expected to total only $165,000. If the proposed rescission of funds is approved, this figure will be reduced to $83,000. With such differences in expenditures, the state has a very difficult task in adequately representing its interests and functioning in a leadership role.

If the President's proposal to eliminate the Water Resources Council in FY 82 is approved, and if no other funding for the state grants program is provided, the State of Washington will be forced to further reduce its water resource planning and management activities.

We urge Congress to continue funding for the state grant program so the states can maintain a partnership role that has been the stated intent of the Federal Government.

STATEMENT OF JAY W. LONGINAKER, SECRETARY, M & P MISSOURI RIVER LEVEE DISTRICT

The M & P Missouri River Levee District is the local agency cooperating with the U. S. Army Corps of Engineers in the construction of Unit L-611-614 of the Missouri River Levee System. Unit L-611-614 encompasses 17.7 miles of levees along the left bank of the Missouri River in Mills and Pottawattamie Counties, Iowa, as well as 9.7 miles of tieback levees on Upper Pony Creek and Lateral 1-B.

This levee unit, when completed, will close the last gap in the left bank protection between Sioux City, Iowa and Corning, Missouri, a distance of ninety river miles. Unit L-611-614 will protect a segment of Interstate Highway 29, the major land link between Omaha and Kansas City, two main railroad lines, the Council Bluffs Waste Treatment Plant and the town of Pacific Junction, as well as 22,000 acres of prime Missouri River bottom farmland. The other segments of the levee system in this area have been completed for many years, leaving this area unprotected.

Stage I of this project - the Upper Pony Creek and Lateral 1-B tieback levees are already under construction. The Army Corps of Engineers, Omaha District, anticipate letting the contract for Stage II - the main river levees as far south as the point where the Platte River empties into the Missouri from the Nebraska side - in two or three weeks. Funding is already available for this stage.

At this time we earnestly request funding in the amount of $4.5 million from your committee to enable the Corps to construct Phase III of Unit L-611-614, the last 7.5 miles of levees. In many ways Phase III is the most vital part of this unit since there will still be a dangerous gap in the left bank protection until it is completed. This portion of our project provides flood protection downstream of the mouth of the Platte - the area most susceptible to major flooding. In March, 1978 a flood on the Platte combined with high water on the Missouri to inundate many thousands of acres in this area. Interstate Highway 29 was in serious danger for a time; extreme flood pressure was on the road embankment and many feared it might be washed out by the flood waters. Construction of Phase III will prevent this problem from occurring in the future, as well as complete the aforesaid left bank protection and protect Pacific Junction, Iowa and two main line railroads.

There is strong local support for this levee unit, and the strongest support comes from the area where Phase III is scheduled to be constructed, since flood protection is needed most there. It would be tragic to suspend or delay this project in the very area where it has the greatest utility.

We urge the committee to appropriate $4.5 million to permit completion of Unit L-611-614.

Statement of Frank Kudrna, Director, Illinois Department of Transportation, on Behalf of Gov. James R. Thompson

The State of Illinois wholeheartedly supports President Reagan in his effort to reduce non-essential spending. As in the past, we are urging you to fund projects and studies which have high priorities. We will also recommend deletion of low priority studies to offset the one increase we are requesting.

The State of Illinois recommends support of items in the President's budget and additions detailed below. Recommendations are based on the latest reliable information concerning project needs, Corps capability, priorities, progress, local sponsorship, and expected results.

SURVEYS SUPPORTED

Chicago - South End of Lake Michigan	$ 100,000
Chicagoland Underflow Plan	2,185,000
Fox River and Tributaries	383,000
Richland Creek	271,000
Diversion of Lake Michigan (add-on)	180,000

ADVANCED ENGINEERING AND DESIGN SUPPORTED

Rock River Areas 1,2,3,4, and 5 (urbanized)	$ 250,000
Eldred and Spankey D&LD	325,000
Hartwell D&LD	210,000
Hillview D&LD	480,000
Meredosia Lake and Willow Creek D&LD	105,000
Meredosia, Willow Creek and Coon Run D&LD	340,000
Nutwood D&LD	330,000

CONSTRUCTION SUPPORTED

East Moline	$ 4,480,000
E. St. Louis and Vicinity	3,100,000
Fulton	5,670,000
Milan	3,810,000
Rockford	2,100,000
Starved Rock Lock and Dam	4,810,000
Dresden Island Lock and Dam	4,230,000
Lock and Dam No. 26	87,000,000

OPERATION AND MAINTENANCE SUPPORTED

Diked Disposal for	
Calumet Harbor	$2,684,000
Chicago Harbor	4,026,000
Waukegan Harbor	108,000

We have requested an add-on of $180,000 to complete the Lake Michigan diversion study. To offset this increase, we recommend deletion of $150,000 for Advanced Engineering and Design of Louisville Lake since most local support for this project has evaporated.

In addition, we recommend deletion of $340.000 for hydropower studies at Carlyle and Shelbyville Lakes since the City of Carlyle has already filed for a license from the Federal Energy Regulatory Commission to develop hydroelectric power at Carlyle Lake and two applications for preliminary permits have been filed for Lake Shelbyville. It does not seem reasonable to expend Federal funds for hydropower studies when private industry is willing to make the investment.

Letter From E. M. Gleeson, Mayor, O'Neill, Nebr.

March 11, 1981

Honorable Mark Hatfield, Chairman
Committee on Appropriations
United States Senate
1322 Dirksen Office Building
Washington, D.C. 20510

Dear Mr. Hatfield:

This is a letter giving unanimous support and approval to the Norden Dam Project. The economic impact on this area will be great. The success of agriculture is the life blood of this community as well as the other communities in this area.

I urgently request that you vote for continued funding of this project.

Yours truly,

E M Gleeson

E. M. Gleeson, Mayor
City of O'Neill

CONCLUSION OF HEARINGS

Senator STENNIS. We will now recess until Thursday, April 2, when the subcommittee will meet at 2 p.m., in room 1223, in closed session on the national security appropriation.

[Whereupon, at 4:20 p.m., Tuesday, March 31, the subcommittee was recessed to reconvene at 2 p.m., Thursday, April 2.]

[CLERK'S NOTE.—The hearing of April 2 concluded the hearings and appears in part 2 of the Energy and Water Development Appropriations for Fiscal Year 1982.]

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